

HN 385.5

(in box)

SS 391



OFFICE OF POPULATION CENSUSES AND SURVEYS
SOCIAL SURVEY DIVISION

A Quality Check on the 1966 Ten Per Cent Sample Census of England and Wales

by Percy Gray
and
Frances A. Gee

LONDON
HER MAJESTY'S STATIONERY OFFICE

£2.30 net

T3004084

TELEPEN



SOUTHAMPTON
UNIVERSITY LIBRARY

BOOK NUMBER	T3-004084
CLASS MARK	HN385.5
	(in box)

SS 391

OFFICE OF POPULATION CENSUSES AND SURVEYS
SOCIAL SURVEY DIVISION

A Quality Check on
the 1966 Ten Per Cent
Sample Census of
England and Wales

by Percy Gray
and
Frances A. Gee

LONDON
HER MAJESTY'S STATIONERY OFFICE
1972

© Crown copyright, 1972



SBN 11 700141 4

ACKNOWLEDGEMENTS

We wish to thank all those members of GRO who helped us in this study. In particular we would single out John Borcham and Frank Whitehead who gave us a great deal of encouragement during the planning stages, and Gerald Boston and Alick Cusion who helped us throughout.

However all our efforts depended on those long-suffering members of the public who had the double misfortune of being picked not only for the Ten per Cent Sample Census but for our Quality Check as well. We are most grateful for their patient help.

PREFACE

Although a census has been conducted at regular ten-yearly intervals* since 1801, it was not until 1961 that a full quality check or post-enumeration study was attempted. On that occasion the General Register Office (GRO) organised the inquiry and used as interviewers some of the enumerators who had carried out the Census. The GRO was not entirely satisfied with the results, and felt that this was largely due to the use of untrained interviewers†.

The next quality check was carried out on the 1966 Census. This Census broke new ground in several ways. Taking place only 5 years after 1961, it was a break with the traditional ten-yearly census. Furthermore it was the first sample census, in that it was designed to cover only 10% of the population. Another novel feature was that GRO invited the Government Social Survey‡ to conduct the quality check on the operation in England and Wales. To safeguard confidentiality, all Social Survey staff handling census forms were sworn in as members of the census organisation.

There were a number of advantages in using the Social Survey organisation for this purpose. It freed the GRO from the additional burden of planning a post-enumeration study, a factor of some importance since obviously less time had been available for planning this first quinquennial census than for previous censuses. It brought to the operation a group of trained interviewers, many with experience of interviewing on the census topics. Perhaps even more important, it brought an independent organisation which could look at the whole operation critically and without any inhibitions.

We, on our part, were conscious of a lack of experience in national form-filling inquiries like the census, which is both complex and compulsory. Our only comparable experience was limited to voluntary postal inquiries which have to be kept very simple indeed because of their voluntary nature. We thought then, and still do, that the design of a census form for completion by the householder is more critical than that of an interview questionnaire. The completion of a census form depends almost entirely on the ordinary householder, whereas in an interview there will always be an interviewer present to clear up misunderstandings. We hope this report will throw some light on the problems involved.

In writing the report we have aimed to meet the needs of 2 classes of reader. The first are those who wish to gain an overall picture of the problems of a form-filling census. These readers will need the full report. At the same time, we have tried to produce a reference book, in which the user of a particular census table can readily find out the deficiencies of the classifications involved. We hope, however, that such readers will be tempted to find out a little more about the problems of census taking.

*There was of course a gap in 1941 due to the war.

†1961 *Census General Report*—Page 48.

‡At the time this inquiry was made the General Register Office and the Government Social Survey were separate bodies. Subsequently, in May 1971, they were merged to form the Office of Population Censuses and Surveys.

In presenting our results we shall give in Part I a fairly full account of the way in which the 1966 Ten Per Cent Sample Census was conducted in England and Wales. We hope the account will be sufficiently comprehensive to provide readers with a clear background to our results and so obviate the need to look elsewhere. Nevertheless, for a full account of the Census, readers must await the 1966 Census Volume giving the General Report. Part II of our report deals with the design of our Quality Check inquiry. Parts III, IV, V and VI give the results. Finally, Part VII provides a general summing up, and looks to the future.



CONTENTS

	page
PREFACE	iv
PART I AN INTRODUCTION TO THE 1966 SAMPLE CENSUS OF ENGLAND AND WALES	
1.1 The choice of sampling procedure for the Census	1
1.2 The selection of a sample of addresses	3
1.3 Treatment of the different types of address in the enumeration	7
1.4 Adjustment of the sample by GRO	10
1.5 The H form	11
PART II THE DESIGN OF THE QUALITY CHECK	
2.1 Our approach to the problem	13
2.2 The sample design for the Quality Check	15
2.3 The questionnaires used in the Quality Check	20
2.4 Non-response and how it has been treated	22
2.5 Processing the data	24
PART III HOUSEHOLDS—THEIR HOUSING AND AMENITIES	
3.1 Basic difficulties in collecting the census data	27
3.2 Fundamental errors affecting the household statistics	29
(1) Incompleteness of the sampling frame	30
(2) Faulty treatment of sample addresses	30
3.3 <i>De facto</i> household size	33
3.4 <i>De jure</i> household size	37
3.5 <i>De jure</i> versus <i>de facto</i> household size	40
3.6 Rooms	43
3.7 Tenure	48
3.8 Household amenities	
(1) Hot water	55
(2) Flush toilets	60
(3) Baths	63
3.9 Cars and garaging	
(1) Privately taxed cars and vans	66
(2) Garaging	69
3.10 Structurally separate dwellings	71
PART IV SOME CHARACTERISTICS OF INDIVIDUALS	
4.1 Economic position	73
4.2 Full and part-time workers	81
4.3 Second occupation	84
4.4 Transport to work	87
4.5 Qualified manpower	90
PART V SPECIAL INVESTIGATIONS	
5.1 Why there was no preliminary report	97
5.2 Faults in the selection of the census sample	99
5.3 Head of household and housewife	102
5.4 Occupation statements	104
5.5 Address five years ago	104
5.6 Date of birth	107
5.7 A check on the coverage of the electoral register	113
5.8 The bias in the 1961 census sampling	115

PART VI THE ENUMERATORS	
6.1 Who are the enumerators?	119
6.2 How they were trained	120
6.3 Contact with the public	121
6.4 The value of previous census experience	123
PART VII CONCLUSIONS	
7.1 Some lessons from the 1966 Census	124
7.2 Developments since 1966	126
7.3 The future of the census	126
7.4 A review of our approach to the Quality Check	127
APPENDIX	
Method used in making Quality Check estimates	128
The H form and notes	131
Instructions for Census Enumerators	137
Institution Abstract and Abstract of Record	194
Specimen pages from 1961 and 1966 Census Enumeration Record Books	195
The L form	197
Questionnaires used in the Quality Check	199
(a) Summary cover	199
(b) Household questionnaire	203
(c) Individual occupation questionnaire	215
(d) Institution questionnaire	222
(e) Caravan questionnaire	226

PART I AN INTRODUCTION TO THE 1966 SAMPLE CENSUS OF ENGLAND AND WALES

1.1 The choice of sampling procedure for the Census

Although we were not involved in designing the sample for the 1966 Census, we shall try to set out briefly the considerations which affected the choice of design before going on to describe it.

As we have said, the 1966 Census was the first census of England and Wales in which only a sample of the population was asked to complete census forms. The substitution of a sample census for a full census had 2 fairly obvious aims, the most important being to save money, though to a lesser extent the aim was to reduce the time interval between census day and the publication of the results.

The total cost of a census can be considered, broadly speaking, under 3 headings:

- (a) Delivering and collecting the census schedules.
- (b) Getting answers to the questions on the census schedules.
- (c) Processing the data.

Of these 3 components of cost, only (a) and (c) fall on the Exchequer, given the traditional British approach to census taking, in which the enumerators do not, in general, fill in the answers on the census schedules. From 1841 to the present day the responsibility for filling in the answers to the questions has rested upon the householder in private households. The enumerators have not acted as interviewers; basically their task has been to find all the buildings, list them, and then to deliver the schedules, and to collect them when completed, giving assistance only where required. Indeed when one looks at their work loads it is quite clear that the enumerators could not possibly act as interviewers in the time at their disposal. Thus (b) does not constitute a cost to the Exchequer, although one cannot disregard the amount of time spent by the public in filling in the forms. So costs (a) and (c) are those which will be reduced by sampling.

A reduction in the processing cost, (c), could equally well have been achieved simply by sampling completed forms obtained from the whole population rather than by field sampling, in which only a sample of the population completed forms. This would have had the undoubted advantage that the sampling operation could have been carried out centrally with a greater degree of supervision than is possible with field sampling. So the case for field sampling rested on the reduction in cost (a), i.e. that cost incurred in delivering and collecting the forms, and on the reduction in the proportion of the public that would be troubled with having to fill in a form.

The cost of delivering and collecting the forms, (a), depends on the number of enumerators needed. This in turn depends on the sampling fraction and the design adopted. For example, had the 1966 sample consisted of complete enumeration in one tenth of the 1961 enumeration districts (each of the 1961 enumeration districts having represented the workload of one enumerator in

1961), then the number of enumerators could have been reduced to a tenth of the 1961 force. The enumeration could then have followed the 1961 pattern, with little or no addition to the enumerator's task. Little more would need to have been done than improve the boundary definitions of the 1961 enumeration districts. However GRO decided that, with such a design, the sampling errors for small local authority areas would be unacceptably high. They opted for a design with a systematic selection of addresses throughout the whole country, since this would have lower sampling errors. But this meant that the cost of enumeration would not fall to one tenth of a full census. Although each enumerator could deal with more than one 1961 enumeration district, he could not deal with 10, because of the distance between the households to be enumerated. For this reason the numbers of enumerators employed fell only from 68,900 in 1961 to 29,338 in 1966, a reduction by a factor of just over 2 rather than by a factor of 10.

Some modification to a straightforward selection of one in ten addresses had clearly to be made in the case of addresses such as large institutions which contain large numbers of people. The chance inclusion or otherwise of such addresses would have a serious effect on the sampling errors. So these required special treatment, which will be described later.

But the use of addresses as sampling units is only a means to an end; the Census aims to produce information about 3 basic units, none of which is necessarily an address. In the first place it is concerned with people as units whether they live in private households or in institutions. Secondly it is concerned with private households as units and with information about their housing conditions. Thirdly it is concerned with the housing stock in terms of structurally separate dwelling units.

Now the definition adopted for a structurally separate dwelling is such that no private household has more than one structurally separate dwelling as its usual residence, although several households can occupy one structurally separate dwelling. Thus the ideal sampling frame would probably have consisted of a list of structurally separate dwellings, supplemented by a list of institutions containing an indication of the number of occupants in each. The larger institutions with more than a certain number of inmates could then have been segregated for 100% selection with subsequent 10% sampling of the occupants. Everything else could have been given a one in ten chance of selection right from the start.

As no such ideal frame existed, it was necessary to attempt to construct one. One possible candidate as a sampling frame, the Electoral Register, was rejected because of the gaps in its coverage. This left a choice between the valuation lists on their own or a combination of the 1961 Census records and new property from the valuation lists.

Normally one prefers to sample from a single source since the use of 2 records raises the problem of possible overlap, i.e. a unit may have 2 chances of selection because it appears in both records. But the valuation lists, particularly for the older property, present sampling difficulties due to the way they are arranged and amended. On the other hand the 1961 Census records had considerable attractions, since 1961 enumeration record books were readily available and provided lists of structurally separate buildings and institutions. Large institutions could be identified at least in terms of the number of occupants in 1961. So it is scarcely surprising that GRO settled for a combination of the 1961 Census records and new property from the valuation

lists as their sampling frame. Even so some gaps needed to be filled and some up-dating and corrections made. Just how this was done will now be shown in a step by step description of the somewhat complicated sampling procedure. To help the reader, the procedure has been set out in diagrammatic form on the next page. The reader may also benefit from consulting the 1966 instructions for census enumerators, contained in the Appendix. These instructions show how the introduction of sampling considerably complicated the enumerator's task. Furthermore the need to brief the enumerators on these points ate heavily into the limited amount of time available for giving them oral instruction. So quite a price had to be paid for the introduction of sampling.

1.2 The selection of a sample of addresses

The source of the greater part of the sample for the 1966 'Ten per cent Census' was the computerised record of the 1961 Census. The computer was programmed to recognise 3 types of unit:

- (i) accommodation which had been classified as a structurally separate dwelling or a vacant unit in 1961,
- (ii) an institution in which less than 15 people had been enumerated in 1961, which was henceforward treated as a 'small' institution, no matter how many people it proved to contain in 1966,
- (iii) an institution in which 15 or more people had been enumerated in 1961 which was henceforward treated as a 'large' institution even though in 1966 it may have proved to contain less than 15 people.

The computer selected a one in ten sample of serial numbers of units falling into groups (i) and (ii), and this enabled their addresses to be copied from the 1961 enumeration record books into the appropriate 1966 enumeration record books. The addresses were entered under a heading "from 1961 ED . . ." which showed their source. Specimen pages from both a 1961 and a 1966 enumeration record book will be found in the Appendix. Units falling into group (iii) were treated quite differently. Lists giving the addresses of all, not just one in ten, 'large' institutions were compiled and these were sent to the appropriate local authorities so that they could add any newly built 'large' institution or any older building that they thought qualified as a 'large' institution, 'large' being defined as liable to contain 15 or more people at the forthcoming Census. Henceforward all these addresses were treated as 'Large Institutions', and all were entered in the 1966 enumeration record books under this heading: they were not sampled at this stage.

Caravans were ignored in drawing the sample from the 1961 Census records since their addresses were likely to be out of date. Lists of all caravan sites believed to contain 3 or more residential caravans were supplied by the Local Authorities and all the sites listed in the enumeration record books under the heading 'Caravan Sites', so they could receive special treatment by the enumerators. Again they were not sampled at this stage.

While the 1961 Census records contributed the greater part of the sample, the valuation lists provided the second largest contribution. Most new buildings erected since the 1961 Census could be sampled from these valuation records maintained by the Inland Revenue in their 229 local valuation offices, and sampling was relatively easy due to the way in which the lists are kept. After revaluations, which occur infrequently, a fresh list is constructed, but thereafter, when a proposal is made to value a new property, it is assigned the



SAMPLING PROCEDURE USED IN THE 1966 TEN PER CENT SAMPLE CENSUS

BEFORE CENSUS:

Sampling Frames - Lists of addresses from which the sample was selected

VALUATION LISTS
Information about
Married Quarters
from Home Office and
Ministry of Defence

Type of unit selected
as a sample address

NEW BUILDINGS
constructed 1961-66

Proportion of each type
of unit issued to the
enumerators

10%

1961 CENSUS RECORDS

Suspected 'DWELLINGS'
and
'SMALL INSTITUTIONS'

'LARGE INSTITUTIONS'

Information from
Local Authorities

'NEW' LARGE
INSTITUTIONS

CARAVAN SITES
with 5 or more
residential caravans

ALL

ALL

DURING CENSUS:

*Classification of
sample address made by
enumerator*

A complete
building or
purpose-built flat

Part of a
building

A 'small'
institution

Any private households
associated with
'large' institutions

Hotels,
boarding
houses, etc.

Hospitals,
schools,
etc.

ALL

Treatment of sample
address by enumerator
as a result of his
classification

All households of the
sample address enumerated on
B forms

All households in the
whole building
enumerated on
B forms

All occupants
enumerated on
I forms

All occupants
enumerated on
B forms

All occupants
enumerated on
P forms

All occupants
listed on **L** or **F** forms
and 10% falling on
the sample line
enumerated on
P forms

10% of caravans
selected by the
enumerator and
enumerated on
B forms

AFTER CENSUS:

*Sampling of forms at
GRO headquarters*

Overall sampling fraction

10%

Infilled sample
of **B** forms
reduced to 10%
at headquarters

10%

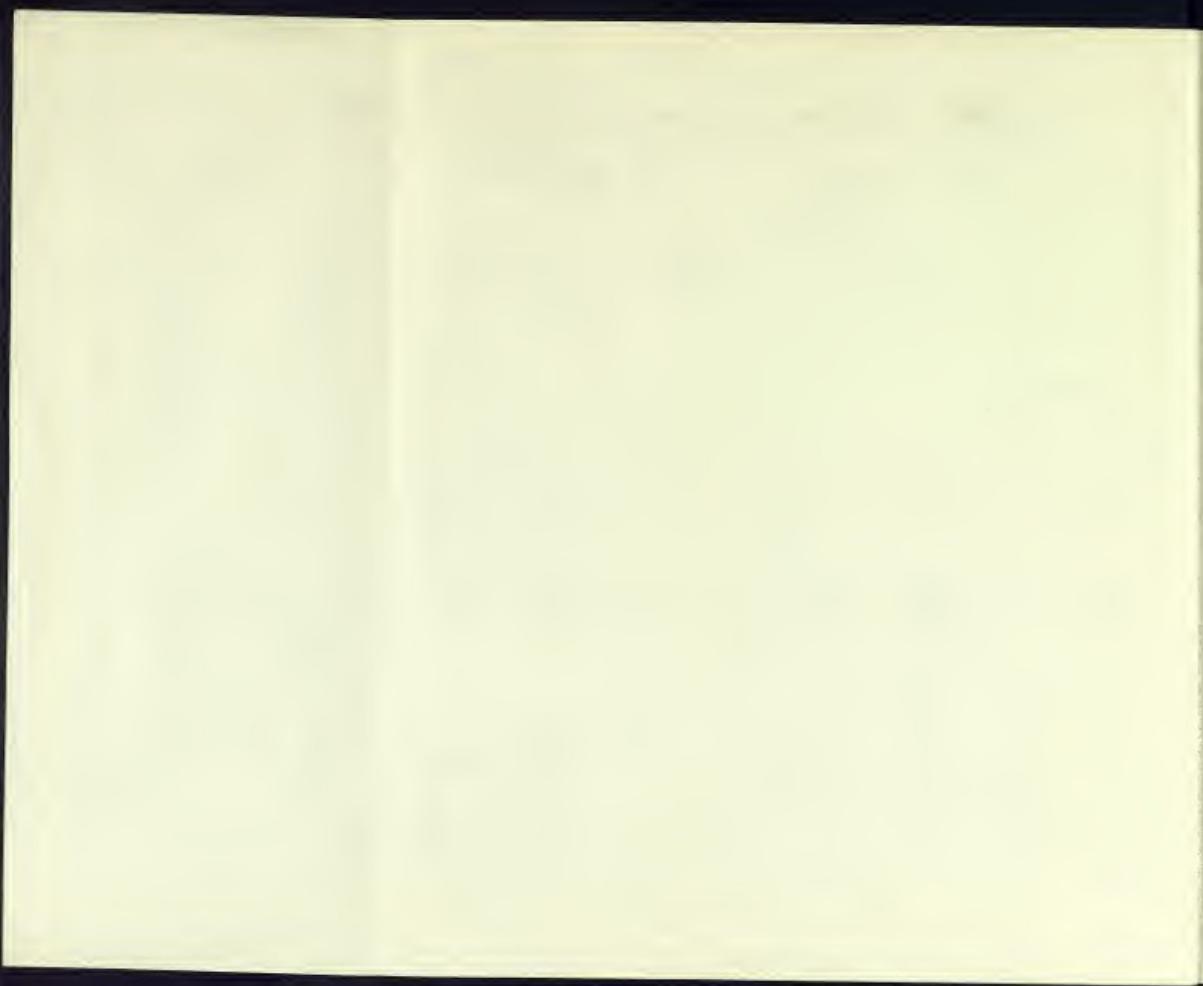
10%

10% of **B** forms
selected at
headquarters

10% of **P** forms
selected at
headquarters

10%

10%



next assessment number in a series prefixed with N and starting at one. These N numbers provide a list of proposals for newly built properties in the district arranged chronologically, and is thus very suitable for sampling purposes. A one in ten sample of new residential properties, for which a proposal had been made on or after 1 April 1961 and up to 31 March 1966, was drawn to GRO's instructions. The 1 April 1961 was chosen as the starting date, rather than 24 April, the day after the 1961 Census, because a proposal is not made precisely on the day on which a building is ready for occupation; the proposal could be made before the building is ready. On the other hand proposals are often made some time after a building is ready for occupation, so that a building for which a proposal was made after 1 April 1961 or even after 24 April 1961 could still have been enumerated in 1961. The GRO had to cope with this possible overlap by searching for the earlier proposals in the 1961 Census records. The GRO also mounted a special check to discover how many buildings were missed because proposals after 31 March 1966 were not sampled (census day was 24 April 1966).

The addresses selected from the valuation lists were assigned to the appropriate enumeration record books and entered under the heading 'From Rating List'.

One group of Crown properties do not appear in the valuation records, so separate lists were obtained from the Ministry of Defence and the Home Office of newly built married quarters for the Army, Navy, Air Force and the Prison Department. One in ten of these addresses were entered under the heading 'From MQ List'.

In this way the sample was pieced together in the enumeration record books under headings which indicated the source of the addresses. The 2 main disadvantages of this procedure were that the sample inherited all the faults of the 1961 Census and that a few sampling units received a chance of selection from more than one source. These difficulties had to be dealt with during and after the enumeration.

1.3 Treatment of the different types of address in the enumeration

The way in which the enumerator was required to deal with different types of address depended in some cases on the heading under which the address appeared in his enumeration record book (ERB) and in other cases on what he found when he got to the address. Caravans and large institutions were cases of the former where the heading in the record book largely determined the enumerator's course of action. So we will deal first with these comparatively small groups of addresses before dealing with the majority of addresses which appeared under other headings and where the enumerator's course of action was determined by what he found at the address.

(a) Large Institutions

Because large institutions had received a 100% chance of entering the sample, some way had to be found of getting a 10% sample of the inmates and of the few private households associated with them. Wherever a private household was found to be associated with a large institution as part of the address, the household was asked to complete an H form, and a ten per cent sample of such H forms was subsequently selected for processing at GRO headquarters. Most of the people at institutional addresses do not, however, live in private

households, and a different type of form was used for the inmates of all large institutions; this P form contained all the personal questions of the H form but was designed to deal with only one person. The method by which a sample of these institutional inmates was selected varied with the type of institution. Experience in the 1961 Census had shown that when a longer form had been issued to one in ten inmates and selection had been left to the management of a hotel, an undue proportion of staff, rather than guests, received the long form. So in 1966 the managers of hotels, boarding houses, holiday camps, etc. were asked to fill in a C certification form stating how many people spent Census night in the establishment or arrived next day before noon having spent the night travelling. The manager had then to get a personal P form completed for each of these people. Much later, at GRO headquarters, these P forms were sampled and only one in ten were processed.

A different procedure was used in other types of large institution such as forces' establishments, hospitals, schools, etc. The 'chief resident officer or other person in charge' was made responsible for completing an L form (F form for the forces), listing all those present on census night. A copy of the listing part of the L form will be found in the Appendix. On one side (L.1) of the form there were 50 spaces for a list of resident staff and their families; on the other side (L.2) there were 50 spaces for a list of everyone else, e.g. the inmates, other than the staff and their families. Both sides of the form were divided into 10 lines labelled 1 to 10 and 5 columns labelled A, B, C, D, E, thus giving 50 spaces.

For each list the person responsible was instructed to 'write the name of the first person in the space in column A line 1, and continue listing on succeeding lines in column A. When that column is complete go on to column B and so on'. The person was also instructed that names 'must be entered systematically from any records you may have, such as staff registers, alphabetical lists or hospital ward lists'. When the list was complete a personal P form was issued to each person whose name was written on the line which had been designated on the form as the sample line. This sample line number was printed at the top of each side of the L form and consisted of one of the numbers 1-10. Thus this type of institution was treated quite differently to large institutions which proved to be hotels, in that only one in ten of those present ever filled in P forms.

(b) *Caravan Sites*

Because GRO could only sample caravan sites as entities, rather than the individual caravans within them, they faced a problem similar to that with institutions, in that a site might contain a large number of caravans. So instead of taking a sample of one in ten sites, all sites were included in the sample. The enumerators had then to list all the caravans on the site in a systematic fashion and issue H forms to every tenth caravan starting with the one indicated by the random number for the site. Each site listed in the ERB had a randomly selected number between one and 10 entered against it. Thus caravans, on sites of 3 or more which were known to the local authorities, had a one in ten chance of selection. Single caravans or groups of 2 had no chance of selection, unless they were in the grounds of a sample address.

(c) *Other Addresses*

Unlike addresses which appeared under the headings of 'large institutions' or 'caravan sites', all other addresses had received a one in ten chance of selection. At these addresses the enumerator's course of action depended upon what he found when he got to the address. If the address proved to be an institution, he had first to check whether the address was also listed in his enumeration record book as a large institution. This was possible due to the way in which the large institution lists had been compiled. If it was, then he treated it as a large institution. Otherwise he treated it as a small institution, even though there might be 15 or more persons actually present; and he issued one or more I forms, this being the form for 'smaller hotels, institutions and forces' establishments'.

The bulk of addresses were of course non-institutional and at these the enumerator had first to decide whether the address constituted a whole building, a purpose-built flat, or failing these, part of a building. In the case of whole buildings or purpose-built flats the enumerator divided the address into one or more structurally separate dwellings and issued H forms to the one or more private households at the address. These presented no problem from the sampling point of view, since each had had a one in ten chance of selection. However difficulties arose in cases where the sample address proved to be part of a building other than a purpose-built flat. At such addresses the enumerator was instructed to enumerate the whole building, not just the part of the building which constituted the sample address he had been given. The main reason for this was to ensure that mistakes made by the 1961 enumerators in identifying structurally separate dwellings were not inherited by the 1966 Census. Although unable to identify which 1961 sample addresses were at fault, the GRO knew that an appreciable number consisted of only part of a structurally separate dwelling. There was too the possibility that an older building might have been structurally subdivided since the 1961 Census. Since the only way a building can be correctly subdivided into structurally separate dwellings is by examining all the accommodation in the building, the 1966 enumerator was asked to deal with the whole building. As the original sample address was only a part of the building, this procedure meant that the structurally separate dwellings and households within the building received more than a one in ten chance of selection, depending on how many 'parts' there were to the building. An example may make this clearer.

Let us consider a building, 2 Acacia Gardens, which had been wrongly enumerated by the 1961 enumerator as 3 structurally separate dwellings, say:—

2 Acacia Gardens	Ground Floor
2 Acacia Gardens	First Floor
2 Acacia Gardens	Top Floor

when really there had only been one structurally separate dwelling occupied by 3 households—a common type of error. If the sample address chosen for 1966 was the ground floor, then the enumerator dealt with the whole building. Equally the whole building would have been dealt with if either of the other 2 parts, the first floor or the top floor, had been chosen. So the chance of the building and its contents being enumerated was increased to 3 out of 10; but

because the enumerator had to deal with the whole building he was able to classify it correctly as one structurally separate dwelling. Later at GRO headquarters an allowance had to be made for this increased chance of selection.

Because structurally separate dwellings were the basic sampling units as well as the basis for an important housing statistic, the GRO had put a great deal of effort into devising this procedure, so that changes between 1961 and 1966 in the subdivision of a building into dwellings could be allowed for, whether these were genuine changes since 1961, or apparent changes arising from errors in the 1961 enumeration. Mistakes in the 1961 classification of structurally separate dwellings were sufficiently numerous that, but for the Census Pre-test of 1964* in which GRO tested and revised their procedure, serious errors would have resulted in 1966.

For further details of how the procedure worked and the extent to which it complicated the enumerator's task, the reader should consult the Enumerators' Instructions given in the Appendix.

1.4 Adjustment of the sample by GRO

After census day the enumerator collected the forms which he had delivered, and checked them. If any information on the form was incomplete, inconsistent, or otherwise unacceptable, the enumerator was expected to go back to the person responsible for filling in the form and try to put it right. After he had assembled all the completed forms, the enumerator sent them to his census officer who also examined them and could ask the enumerator to go back to a householder and remedy any defects. When all the forms had been checked they were forwarded to GRO together with the enumeration record books.

However the forms received by GRO did not constitute a one in ten sample. They consisted of:

H forms from—10% of households in sample addresses which were complete buildings or purpose-built flats,

—an inflated sample of households in buildings which had received more than one chance of selection because the sample address was only part of the building.

—all the households selected in association with a 'large institution',

—10% of households in the caravans selected on 'caravan sites'.

I forms from —10% of the institutions which had not been selected as 'large institutions'.

P forms from—all the people in hotels or boarding houses which had been treated as 'large institutions' in the sampling.

—10% of people in forces' establishments, hospitals, schools, etc. which had been treated as 'large institutions'.

There were, therefore, 3 sections of the sample which still required adjustment by GRO to ensure that every form used in the analysis had received an

*J.R.L. Schneider: "The Census Pre-test of 1964" *Journal of the Royal Statistical Society, Series A*, vol. 128, 1965, p. 300.

equal chance of selection:

- (i) the H forms for households in buildings which had received more than one chance of selection,
- (ii) the H forms for households associated with 'large institutions',
- (iii) the P forms of people in hotels and boarding houses.

The second and third of these 3 groups presented little problem; the H forms for households associated with 'large institutions' were given their correct representation by rejecting 9 out of 10, and the P forms for persons in hotels and boarding houses were similarly reduced.

The first group posed quite a problem. Where a sample address proved to be part of a building, the whole building had been enumerated, giving it 2, 3, 4 or even 20 chances of selection, depending on the number of parts into which it had been divided in the sampling frame. Most such sample addresses had been taken from the 1961 Census records, and the building's chance of selection could be determined by referring back to these records. One possible way of dealing with this group would have been to include each whole building but to give it a weight on the computer equal to the reciprocal of its chance of selection. However GRO did not want the awkwardness of handling the fractional items which would arise if this was done; they preferred to use a rejection procedure, whereby half the units with 2 chances of selection are rejected, two-thirds of those with 3 chances are rejected, and so on. The disadvantage of doing this with buildings as units was that buildings often constitute large clusters of dwellings and households, so the efficiency of the sample would have suffered. But GRO did not need to use whole buildings; structurally separate dwellings were the largest units with which they were concerned, so they adopted a rejection procedure based on structurally separate dwellings, which had the added advantage that not all the H forms relating to the buildings required processing.

Where GRO could establish from the completed 1966 enumeration record book that the part of the building selected as a sample address constituted a whole structurally separate dwelling in 1966, then only the forms relating to that part of the building were processed, the rest were rejected, and so no adjustment was needed to the sample. But if the part of the building selected as a sample address proved to be only part of a structurally separate dwelling or parts of more than one structurally separate dwelling, then this could not be done. In such cases GRO confined the processing to those forms relating to the structurally separate dwelling containing the sample address or the minimum number of dwellings necessary to contain the sample address completely. Weights were assigned to these dwellings so that a rejection procedure could be used on the computer. The final result was a fully edited computer tape containing information about a sample of one in ten structurally separate dwellings selected with equal probability. It follows that households and persons were also correctly represented on the tape.

1.5 The H form

The main form used in the census, and the one that concerns us most, was the H form that householders were asked to complete. Opened out in order to answer the questions, it measures $18\frac{1}{2}'' \times 21''$. Because of this we have not been able to reproduce it full size but give instead in the Appendix a reproduction of the filled in, much reduced, Example which was issued to

householders with the form. This serves to show the general layout. Later when we come to discuss the errors arising from any particular question we shall reproduce the question exactly to show the precise size of print and layout used. Together with their H form and the example, householders were also issued with a leaflet (*Notes for H form*) giving guidance on answering the questions: this too will be found in the Appendix.

2.1

class
total
par
cor
side
cen

draw
print
in t
of
inst
ma
GH
edit
the
to

by
ers
ch
we
sel
ag
on
ma
For
fr
of
ar

ma
sa
re
me
Se
ob
w
th
A

PART II THE DESIGN OF THE QUALITY CHECK

2.1 Our approach to the problem

We considered that the main aim of a quality check should be to take the classifications which appear in the published census tables, and measure the total error associated with them. Such a measurement would involve comparing the final version in the census table with what we believed to be the correct version of each classification. But we wished to go further. We considered it equally important to find out how, why, and at what stage, any census error arose; for in this lies the hope of improving future censuses.

Now the final census version of the data for a sample of the sample addresses could eventually be obtained by instructing the census computer to print out, in punched card form, the data for each person and household used in the production of the census tables. These data would reflect the net effect of all stages in the census process: the enumeration, the census questions, the instructions given to the formfiller, the formfiller's answers, any amendments made by the enumerator or by the census officer, and then the processing at GRO, i.e. the manual editing, coding, punching of cards, and computer editing. This would give us the final census version; but how were we to obtain the correct version without affecting the census version and, at the same time, to avoid counting our own errors as part of the census error?

There was one important limitation on what we could do; this was imposed by our terms of reference, which made a complete measurement of the total error impossible. Since GRO had already planned to conduct a coverage check to discover buildings not included in the Census sampling frame, we were asked to confine our attention to what went wrong at buildings already selected for the Sample Census. Our inquiry was to deal with part of the coverage problem but not with all of it. Moreover, the GRO's plans for their check on the coverage of the sampling frame did not include collecting the information which would be necessary to follow through the effect of any error. For example, if a household were to be discovered which had been omitted from the census, no attempt was made to find out whether it had the sole use of a bath. Thus a count could be made of the number of omitted households and persons, but not their characteristics.

To check the information recorded on the census forms and in the enumeration record books we needed to interview and make observations at a sample of the sample addresses in such a way that our interviewer could reconcile the answers she got with the census version, eliminate her own mistakes, and find reasons for the census errors. Then at headquarters Social Survey coders could use the GRO's coding instructions to code the 2 versions of the data, the one from the census form, and the other the corrected version, where this was different. Much later, these 2 versions could be matched with the fully edited GRO version, which would be obtained from the computer. At this final stage any Social Survey processing errors could be eliminated.

When could the Social Survey fieldwork start? Since people move and memory fades, the sooner after census day the better. How soon could that be

without interfering with the normal treatment of the census forms belonging to our sample? It could not be before 22 May, since between census day (24 April) and that date the enumerators and census officers would be checking the census forms they had collected and would be revisiting some households to fill in gaps on the forms and remove inconsistencies. So before this date we could neither interview people nor get copies of the completed forms and enumeration record books. Before this point in time any intervention on our part would have affected the census information for our sample. But after that date, quite apart from interviewing considerations, there was another reason for proceeding with all speed. We wanted to get the original documents for our sample back into the mainstream of the census processing without any delay, so that they would be handled in the normal way.

Although difficult to organise, photocopying was clearly needed. Apart from speed, photocopying had the advantage that both our interviewers and we ourselves would be able to see any alterations on the forms and any changes in handwriting, important clues as to how errors arose.

So we arranged for all the documents relating to our sample to be despatched post-haste to GRO headquarters at Somerset House on 23 May. In many cases they were collected by car by members of the GRO. The main conference room at Somerset House was taken over by the Sampling Branch of the Social Survey. From there we organised the photocopying of the enumeration record books, the selection of a sample of the sample addresses in the books, the photocopying of the relevant census forms, and finally the despatch of these copies to our interviewers. To minimise the disruption of other copying work at GRO and to speed up the sampling, a large part of the work was done over the Whitsun holiday weekend. Priority was given to clearing those enumeration districts with which our interviewers would deal first. Meanwhile our interviewers were ready to start, having already received a two-day briefing on the inquiry.

Thus an interviewer received a photocopy of a completed enumeration record book in which were marked those sample addresses picked for our sample, together with photocopies of the completed census forms relating to those addresses. At first sight there may appear to be methodological objections to the interviewers knowing the original answers. Ideally in a checking operation the checker makes an independent observation without knowing in advance the previous observation. The 2 observations are then compared by someone else, and only then, if there is a difference, is an attempt made to find out which is wrong and why. But all this takes time and, as we have said, people move and memory fades. Furthermore informants get increasingly irritated at being revisited yet again. The householders involved in our investigation had already had the misfortune to be chosen as 'ten per centers', and had completed a census form. For many this form filling would have constituted a lengthy task. So we did not want to try their patience too far, since our inquiry, unlike the census itself, was voluntary. We therefore preferred to have only one visit, where the interviewer asked somewhat different questions to those on the census form. However the questions she did ask led to the same classifications, and so enabled her to reconcile her version with the census version on the spot. Above all we wanted to discover how errors had arisen.

Our terms of reference excluded the possibility of a complete check of all the census errors since GRO had already planned a coverage check which would

cover addresses missing from the sampling frame. The starting point for our inquiry had to be the addresses in the sampling frame; these addresses were our sampling units.

What we wished to check fell broadly under 3 headings:

1. Some aspects of coverage and the sampling procedure.
2. Demographic and housing information.
3. Personal characteristics of adults, e.g. economic activity and educational qualifications.

The first 2 of these could be adequately checked by observation and by talking to the formfiller. However the third of these, which involved checking the personal characteristics of adults other than the formfiller, presented more of a problem. Clearly the person concerned was most likely to know the correct answer for himself, but where a wrong answer had been recorded the reason for the error might lie with the formfiller. Since the correct answer was our main concern we had therefore to interview other adults besides the formfiller.

We became concerned at the volume of interviewing that was required to deal with one household, for although the census itself had been compulsory, our quality check survey had to depend on the voluntary cooperation of the public. Multi-purpose interviews that bob about from subject to subject without any common theme are not the most popular with either interviewers or informants. We had to prevent the interview burden becoming too great for our interviewers or our informants. For this reason we would ideally have preferred to have had a series of samples, and to have broken down the inquiry into several parts. But we had insufficient resources for this, so the inquiry had to be based on a single sample of addresses, the design of which we shall now describe. Readers should also refer to the diagram on the next page.

2.2 The sample design for the Quality Check

About 100 interviewers were available for the inquiry, and about 6,000 households could be covered in the field time available. Our sample needed to be widespread, so we decided to take 100 census districts as our first stage units. (A census district is the area controlled by one census officer, of which there were 1,293 in England and Wales.) The 100 census districts were selected systematically with probability proportional to the number of enumerator workloads in a census district from a list of districts arranged in geographical order. One enumerator workload per selected census district would have yielded about the right number of households, but we felt that the sample should cover more enumerators. Accordingly we decided to take 3 enumerator workloads at random from each selected census district, and to compensate by taking only one in 3 of the majority of addresses within them. With 3 enumerators per census district it was just possible that we might detect any major fault in the instruction given to enumerators by their census officer.

A further benefit of this choice of design was that the 3 enumerator workloads in each census district could be randomly assigned to 3 subsamples of the overall sample. These 3 subsamples, A, B and C, were used both during the interviewing and in the analysis of the quality check to limit some of the work to smaller samples.



PREPARATION OF QUALITY CHECK SAMPLE

Selection of census districts

100 census districts selected
with probability proportionate to
the number of enumerators
in the census district

Selection of enumerator workloads

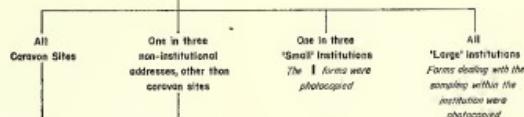
Three enumerator workloads selected
at random in each census district

The 300 workloads of sample addresses were listed
in 432 enumeration record books; one workload
often comprised more than one 1966 enumeration
district, and hence more than one book. After
the enumeration had been completed, the books
were photocopied.

A sub-sample
B sub-sample
C sub-sample

The three workloads in each census
district were assigned randomly
to three sub-samples.

Selection of a sample of the sample addressees¹



Photocopying of H forms

H forms of the 10% of households who filled in forms on coronation sites
H forms of all households enumerated¹ there

Selection of persons aged 15 and over

One in two of persons aged 15 and over enumerated¹ on H forms in sub-samples B and C only
Marked on the photocopies of the H forms

Field investigations made by
Sociol Survey interviewers:

CENSUS SAMPLING PROCEDURE

This has been carried out in the field was checked by observation and in an interview with the person who filled in the forms. In institutions the quality check was limited to this.

DEMOGRAPHIC & HOUSING INFORMATION

This was checked in an interview with the person who filled in the H form. Socioeconomic information was also obtained for households that had been omitted.

ECONOMIC ACTIVITY & EDUCATIONAL QUALIFICATIONS

This was checked in an interview with the individual concerned but limited to sub-samples B and C. No attempt was made to get this information for persons incorrectly omitted from H forms.

¹ When the census sampling unit was part of a building other than a purpose-built flat, all the households in it had been enumerated. Thus, such households and their members required down-weighting relative to the others.

selected
Sind
want
had
falling
clue
that

Cer
rec
the
for
dis

Fris
drea
Ca
bo
by
cas

the
inf
co
hou
sin
to
wi
ex
w
te

qu
ca
te
b
a
p
a
ti
d
A
v
s
per
c

*

Although one in 3 of the more normal type of addresses was taken in each selected enumeration district, 2 classes of address were sampled differently. Since caravan sites and large institutions are relatively uncommon and we wanted a sufficient number so that we could examine how the field sampling had been carried out, we decided to include in our sample all such addresses falling within our selected enumeration districts. As GRO had already included all such addresses in the census sample, and not just 10%, it meant that they were represented in our sample at 30 times the rate of other addresses.

Our selected sample of 300 enumerators* had enumerated 432 of the 1966 Census enumeration districts, each of which had a separate enumeration record book. In settling the number and boundaries of enumeration districts the GRO had to make it possible to combine them into all the possible areas for which separate analyses would be needed. As a result, some enumeration districts were too small to constitute an enumerator workload. Thus we had first to photocopy 432 enumeration record books and then to select the addresses which our interviewers had to visit, and mark them on the photocopies. Caravan sites and large institutions were distinguished by the headings in the books, and all of these were chosen. The remaining addresses were sampled by taking a systematic sample of one in 3 with a random starting point for each book.

Once an address had been selected for the quality check by marking it on the photocopy of the 1966 enumeration record book, we were able to use the information in the book to find the one or more census forms which had been completed for that address. Wherever an H form had been completed for a household, the form was photocopied. In the case of large institutions we had already decided not to try to check the personal P forms for the inmates, since in many cases, e.g. hotels, the birds would have flown. So we decided to abandon also the checking of the small number of households associated with large institutions. Our checking at institutions was mainly confined to an examination of how the line sampling had worked in those large institutions where the person in charge was responsible for issuing P forms to a one in ten sample of the inmates.

As has been said, we were concerned about the volume of interviewing required to carry out a complete check of all the census information collected for each household in our sample. The best way of reducing the volume seemed to be by cutting the sample size for that part of the inquiry where we would be checking those census questions which required an interview with other adults besides the formfiller. The cutting was done in 2 ways. In the first place, we restricted this part of the check to the B and C subsamples, i.e. to about two-thirds of our total sample; thus, by giving priority in the field to the A subsample, our interviewers were given a chance to become practised in dealing with the first place part of the check before having to deal with it all. And secondly, the volume of interviewing required in the B and C households was further reduced by subsampling the adult members aged 15 and over. The subsample was selected and marked on the photocopies of the H forms by putting a red ring round every alternate answer to question 10, this being the first of the block of census questions which was restricted to adults aged 15 and over. Subsampling in this way meant however that for this part of the check

*A total of 29,338 enumerators were used in England and Wales.

we did not follow through the effect, on such things as the economic activity and educational qualifications, of wrongly including or omitting an adult in the enumeration of an address. We merely checked the answers of the persons on the H forms.

So far we have shown how the quality check sample design was determined by our approach to the problem, by our terms of reference, and by the resources available. When the sampling was completed each Social Survey interviewer set out with a photocopy of one or more enumeration record books, in which were marked the addresses which she had to investigate. For each such address she had photocopies of the relevant completed census forms, showing in the case of the B and C subsamples the adults whose characteristics were to be checked. At each address she investigated the accuracy of the census information using the appropriate quality check questionnaires, of which there were 5 different types.

2.3 The questionnaires used in the Quality Check

In designing our questionnaires we started from the assumption that for any household or person there was only one correct answer to any census question. A national form-filling census is not the place to deal with attitudes or opinions; the questions should be factual, and the concepts well defined. In fact there proved to be few cases where there was any doubt what answer GRO wanted, but when we have had to decide between 2 possible answers we shall indicate the problem.

The questions asked in the quality check interviews differed from the census questions, partly because the census questions were in any case unsuitable for an interview situation, but mainly because we thought their repetition would be useless, since the same misunderstandings would be likely to arise. So we approached the problem by asking different and more detailed questions, from which the census classifications could be derived.

Before going into the field our interviewer copied the census answers on to the appropriate sections of the quality check questionnaires so that they would be readily available for reconciliation purposes. This obviated the need for the interviewer to carry round the rather bulky photocopies of the census H forms, and meant that she had some picture of the situation before starting an interview. It might be thought that there are dangers in providing the interviewer with the original census results, in that those answers might be too readily accepted. In our view this is more likely to happen where the checker is one of the original enumerators, with feelings of loyalty towards his fellows. Our interviewers had played no part in the original census; at our briefing we tried to imbue them with a critical approach. Furthermore, our questions differed from the original census ones.

In designing our questionnaires we had to rely on our considerable experience with interview surveys dealing with the census subjects, since there could be no pilot testing of the questions, contrary to the usual Social Survey practice. Adequate piloting of a post-enumeration survey is very difficult, mainly because the groups one is interested in, those in error, are likely to be very small. But it is also very difficult to simulate the census conditions. So we had to dispense with a pilot run. However most of our interviewers had interviewed on surveys where the census subjects had been dealt with and

were alive to the difficulties. Each of our interviewers attended one of a series of two-day briefings on the quality check.

Copies of the 5 questionnaires used will be found in the Appendix. An explanation of their purpose follows:

(a) *The Summary Cover*

At every address in her sample the interviewer had to answer a series of questions printed on a manilla folder, which served as a summary cover, and in which could be tagged all the other questionnaires used at the address. Such a cover was very necessary to help preserve the documents during the frequent handling involved in processing this type of inquiry.

When completed, the cover provided the main check on the enumerator's work at the address. The front page was filled in before the interviewer went into the field and showed how the enumerator had dealt with the address, i.e. as a large institution, as a small institution, as a caravan site, or in terms of structurally separate dwellings and households. On the back page the interviewer gave her version of what she found.

(b) *The Household Questionnaire*

At most addresses the enumerator had correctly sorted out the occupants into households, and the main use of the household questionnaire was to check first of all the answers to the demographic census questions 1-9 on the H form and then the household characteristics in census questions 24-27, i.e. number of rooms, tenure, amenities and car ownership. For such households, the interviewer had already copied the householder's answers from the photocopy of the H form on to a quality check questionnaire before going into the field.

An entirely different use was made of the household questionnaire in the exceptional cases where the enumerator had made a basic mistake at an address, for example by omitting a household. Here the household questionnaire was used to obtain the census information and fill in what would otherwise have been a gap in the census coverage.

Generally the questionnaire was addressed to the person who had filled in most of the H form, unless that person was away for the survey period, in which case a responsible member of the household was interviewed instead. Sometimes, however, a non-member of the household, or the enumerator himself, had filled in the H form; in such cases the head of the household (the first person on the H form) was interviewed.

Although the main purpose of this questionnaire was to check the census, 3 questions (20-22) were added so that a check could be made on the coverage of the current Electoral Register. This special investigation, which was carried out at the request of the Home Office, has been reported upon fully elsewhere*.

(c) *The Individual Occupation Questionnaire*

This questionnaire dealt with the economic activity and educational qualifications of adults aged 15 and over, topics which had been covered by

*P. G. Gray and Frances A. Gee "Electoral Registration for Parliamentary Elections" SS 391 HMSO 1967.

census questions 10-23 on the H form. Its use was limited to every alternate adult aged 15 and over on the completed H forms from households enumerated in the B and C subsample of addresses. Once again the census answers were copied on to the questionnaire before the interviewer went into the field. Unlike the household questionnaire which was addressed to the form-filler, the individual questionnaire was addressed to the adult concerned, though of course this would sometimes be the formfiller. In this way we expected to get the correct answer to the census questions, although we would not always get the reason for an error where the person concerned was not the person who had filled in the census form.

(d) *The Institution Questionnaire*

At addresses which proved to be large or small institutions the interviewer completed only a summary cover and a special short questionnaire. In the main this questionnaire dealt with whether all the buildings and occupants had been included; but in addition an attempt was made to check the fine sampling in those large institutions where L forms had been used, since in these cases the person in charge had played a large part in deciding who should constitute the one in ten sample to complete P forms. No attempt was made to check the personal information on the P forms for the inmates of any institution.

(e) *The Caravan Site Questionnaire*

At addresses which proved to be caravan sites the interviewer completed a summary cover and then a special questionnaire. This questionnaire established whether all the relevant caravans had been listed, and whether the one in ten sample had been selected correctly by the enumerator. After completing this questionnaire the interviewer carried out interviews at the enumerated caravan households using the household questionnaires and the individual occupation questionnaires. A subsample of one in three of these questionnaires was later drawn for inclusion in our analyses, since otherwise they would have been over-represented.

2.4 Non-response and how it has been treated

The Quality Check sample, as selected from the enumeration record books, consisted of the following groups of addresses. There were 291 large institutions, of which 160 (e.g. hospitals) fell in the group enumerated on L forms, with which we are mainly concerned. There were also 27 caravan sites. Both these groups, it will be remembered, had been sampled at a rate 30 times higher* than the ordinary addresses, of which there were 5,587. Our interviewers managed to locate all these addresses, in some cases after much effort, and completed the summary cover describing the general situation. Sometimes, of course, they found that a pre-1961 building had been demolished. Where appropriate they tried to secure interviews using the household questionnaire. The result of our attempts to contact and interview the 5,239 households derived from the census can be summarised as follows:

*GRO had taken all such units, not one in ten; and we had taken them all, not one in three.

	Number	%
<i>Interview obtained</i>		
(i) Census had used a correct unit	4,863	92.9
(ii) Census unit wrongly included	59	1.1
(iii) Census unit really contained more than one household	60	1.1
		95.1
<i>No interview obtained</i>		
(iv) Refusal	56	1.1
(v) Non-contact	201	3.8
		5.239^*
Total households according to the 1966 Census	$5,239^*$	100.0

*In addition our interviewers found and interviewed another 60 households who had been missed on the Census night because they were overlooked or because the enumerator went to the wrong address. They also managed to interview 76 out of the 91 households whose residence was wrongly said to have been completely empty on census night due to the absence of the whole household.

The response was gratifyingly high, in that interviews were secured with over 95% of these census households; the loss due to refusals was only 1%, while a further 4% were lost because of removals, sickness, temporary absence, and the like. Partly because the non-response was low, and partly to avoid further complicating the already complicated presentation made necessary by our attempt to follow through the effect of the fundamental errors, we have treated the non-response in a slightly unusual manner. The 257 households which were not interviewed have been included on the main body of all the household data tables and treated as if the census information was correct. (For example, they are all included in the diagonal of Table 3.1 on page 35). If readers wish to see the effect of making the more usual assumption, that the error rate for households where we did not get an interview is the same as for those where we did, then the misclassification rates given for household characteristics should be increased by a factor of 1.05.

Our treatment of the non-response for household characteristics might be considered as an extension of our general principle that we have treated the census as correct unless we have good evidence to the contrary. However we did not feel justified in pursuing the same policy with the data for individuals because of the appreciably higher non-response and because we did not interview the inmates of institutions.

It will be recalled that our sample of individual persons consisted of half the adults aged 15 and over on the photocopies of the census schedules of the B and C subsamples of enumeration districts. Thus when sampling individuals our sampling fraction was only one third of that for the households. In selecting the adults we took absentee members of the household as well as the persons present on census night and, although only the persons present are included in the census tables that deal with individuals, we attempted to interview everyone.

TABLE 2.1
Response rates for individuals covered in the Quality Check

	Non-institutional population			
	Present on census night		Absent household members*	
	Household members	Visitors	All	
Interview obtained	% 88.0	% 25.4	% 87.0	% 71.4
No interview obtained				
Refusal	1.5	1.6	1.5	1.8
Non-contact	10.5	73.0	11.5	26.8
	100.0	100.0	100.0	100.0
Total adults selected for sample	3,821	63	3,884	56

*Does not include members of households completely absent on census night.
See the footnote on page 23.

Nearly all the interviewing took place during June and July 1966. We obtained interviews with 88% of the household members who had been present on census night and with 71% of those who had been away. Not surprisingly we were much less successful in interviewing those who had been visitors on census night; only 25% could be located and interviewed. Nevertheless we have had to base our analyses on the persons present on census night, since this is the basis used in the census volumes.

When use is made of the results in Part IV of our report, it must be remembered that we have not attempted to follow through the effects of the fundamental errors such as wrong omissions or inclusions, nor have we dealt with the institutional population. The method used in making estimates from our results assumes that the error rate is constant throughout these missing groups as well as among the non-respondents. The analyses in Part IV are based on the 3,380 persons who were present on census night and from whom an interview was obtained. They therefore make up 87% of the 3,884 adults present on census night who were selected for the sample; non-respondents are excluded from the tables. Thus the treatment of non-response is different in Part IV of the report to that used with the household data in Part III.

2.5 Processing the data

Great care was needed in the processing of the Quality Check since we were aiming at a considerably bigger quality than the original operation. In the first place a good deal of effort had to go into examining any evidence which suggested that the census had used the wrong unit. For example the enumerator could have dealt with the wrong address, could have wrongly included or omitted a household, or could have allowed 2 households to be treated as a single household on one form. Where there was any doubt, the situation was cleared up by a further visit to the appropriate address in our sample. Next we dealt with basic errors such as the incorrect inclusion or omission of people from the census H form. Finally, we dealt with errors in the information about those households and individuals that had been correctly included.

The first stage in this latter process consisted of coding into the census classifications the answers to the census questions which had been copied by our interviewers from the photocopies of the census forms. We used the GRO coding instructions to do this. Then we coded the Quality Check information in the same way. So far we had got only 2 of the 3 items we wished to match, these 2 being the Quality Check version of the census data and the Social Survey coding of the census data using the GRO coding instructions. We still needed the final edited version of the census data that was to be used in the census tables, but this did not become available until many months after census day. When it did, the data were in a slightly different form to that in which GRO had originally punched their cards for the computer.

Originally GRO had punched up the census data for a household in the form of one card per person. There was no separate household card; the household characteristics were punched on the card belonging to the first person in any household. All the cards relating to one household had been given a common serial number consisting of the census district number, the enumeration district number, and the census schedule (H form) number. Rather to our surprise the cards bore no serial number distinguishing one member of the household from another; we had wrongly assumed that they would carry the person number at the head of each column of the H form. This lack of a serial number was to cause us trouble.

The final edited version was obtained by instructing the computer to punch out a special set of cards from the fully edited data tapes for each enumeration district in the Quality Check sample. To assist the matching process, the household data were punched on to one type of card and then separate person cards were punched giving the characteristics of each person in the household. A person number was punched on to these cards to show the order in which the individual appeared on the computer tape. Unfortunately, as we were to discover, this did not always correspond to the order in which the individuals appeared on the original H form.

There was a great deal more trouble to follow with the serial numbering. At the sampling stage, when the H forms were photocopied, they already bore serial numbers, consisting of the census district number, enumeration district number, and census schedule number, and we knew that these were to be punched by GRO for identification purposes. So we carefully preserved this numbering system on all our documents. What we had not bargained for was the large volume of changes which were to be introduced by GRO during the processing. In the first place, the serial numbers of some census districts and enumeration districts were changed to fit in with changes in administrative boundaries that had recently been introduced. Worse, some enumeration districts had been subdivided. But worst of all, many changes had been introduced by the editors in the serial numbering of addresses within an enumeration district; sometimes a whole block of addresses had had their numbering altered by one. In all we found that about a tenth of the households had acquired serial numbers that differed from those which they had had originally and which had been punched on to our data cards.

Even without these difficulties arising from changed serial numbers, the matching exercise would have been difficult enough, since no match could be expected from an appreciable number of cards for a variety of other reasons. Since our sample consisted of only one in three of the addresses in an enumeration district, it was clear that about 2 out of 3 GRO cards would not

have a matching Social Survey card. But quite a number of Social Survey cards could have no corresponding GRO cards either. The major contribution to this group arose because of the multi-chance rejection procedure used by GRO to compensate for the over-sampling of households in some multi-household buildings (see page 11), but until this stage we could not know which households had been rejected. And there were also other cases; for example, no match could be expected where the census had enumerated the wrong household or omitted a household. However, where the census had wrongly counted 2 households as one, the individual persons within the households would have matching cards, even though the households would not have a match. Some of these cases required special treatment in our analyses.

We had been led to believe that the number of changes of serial number would be small; but our first attempts to match solely on serial numbers produced a great deal of mismatching and frustration. The only way to cope with this was to send for, and go through, the original enumeration books on which GRO had recorded changes in serial numbering during their processing, and then to amend the serial numbers on our punched cards. As a further check that no mismatching remained, we matched the individual person cards, not only by serial number, but by age of the person, comparing the age as given by GRO with that derived by Social Survey from the photocopy of the census form. Our first idea here was to match on the full date of birth (i.e. day, month and year), that being the best possible discriminator between persons; but this proved impossible as the fully edited census tape no longer contained this information, but only the age. A small number of processing errors in the GRO treatment of the dates of birth came to light at this stage.

Finally, after many weeks of painstaking work, the matching was completed. If difficulties of the kind that we experienced are to be avoided on a future occasion, more careful advanced planning must be undertaken.

So at long last we were in a position to compare

- (a) the original census answers as coded by Social Survey using the GRO coding instructions,
- (b) the Quality Check version,
- (c) the final edited GRO version as used in the census tables*,

for the vast majority of cases where the census had used the correct basic unit, e.g. the right household. Where there was any discrepancy between (a), (b) and (c), we re-examined the original documents to make certain that the error had occurred in the census and had not been produced by Social Survey. Where it was a census error we noted its cause—in many cases our interviewers had discovered how the error arose and in others we could deduce this with a fair degree of certainty.

*A number of interim, but mainly unpublished, reports on various aspects of the Quality Check were based solely on a comparison of (a) with (b).

PART III HOUSEHOLDS—THEIR HOUSING AND AMENITIES

3.1 Basic difficulties in collecting the census data

The most important function of a census is to count everyone who is in the country at a particular moment in time; and the best method of doing so is to enumerate people once and once only in the place where they happen to be at the time. In this way everyone is included, and no one gets counted twice. But census takers have not been content with simply counting and classifying people as individuals; they have wanted to do more. The census taker wants to group the non-institutional population into the households in which they usually live, and then to examine the characteristics and amenities of their usual residences.

The basic unit in the 1966 Census was therefore the household; this was defined as:

- "(a) any group of persons, whether related or not, who live together and benefit from a common housekeeping; or
- (b) any person living alone who is responsible for providing his or her own meals".*

The census household is therefore an economic unit, whose members all have the same usual residence. This household group is referred to as the *de jure* household.

We have, however, said that the best method of counting the population is to enumerate everyone wherever they are at a particular moment in time. Clearly, whatever night is chosen for census night, some people are going to be away from their normal households, perhaps staying with another household. For this reason it is not enough simply to record the usual residents in a particular household space. It is necessary to know who is actually spending census night there, including any visitors and excluding any members of the *de jure* household who are absent. These people—the persons present on census night—are called the *de facto* household.

It is in fact far more straightforward only to record the people who are present on census night, and indeed before the 1961 Census this was all that was done; no attempt was made to get details of the usual, *de jure*, household. There are quite serious disadvantages to this approach. If there is only information about the *de facto* household, any housing data are related to a household which may be quite different in size and composition from the normal household. It is possible, too, that some formfillers may include absent members of the usual household on the form because they feel they ought to be put down where they belong.

In 1961, 10% of households were issued with a larger census form which included an extra section asking a limited number of questions about absent household members. (These absentees would also have been enumerated with

*Instructions for Census Enumerators 1966, Page 6.

the full range of questions at the place where they actually spent census night). Thus for the first time in the history of the British Census, information was obtained about the composition of the normal, *de jure* household. However, since the relevant questions were only on 10% of the census forms, the use made of the *de jure* household had to be limited to producing the Household Composition tables, where only the 10% sample was used. Most analyses relating to households needed to be based on a full enumeration and so had to be based on a *de facto* household (i.e. persons present) basis.

The 1966 Census went further than 1961 by asking for the inclusion of absentees on each form, and asking all the questions about absentees as well as persons present. Unlike 1961, questions about absentees were not in a separate section on the 1966 form but were incorporated in the main part of the schedule. It was therefore possible to define the census household in the terms quoted earlier; the basic unit is the *de jure* household, but at the same time everyone present has to be recorded.

Reproduced below is the instruction that appeared at the top of the census form and that part of the leaflet accompanying the census form which gave additional guidance.

YOU SHOULD FILL IN A COLUMN FOR

each person alive at midnight on 24th April, 1966 who spends Sunday night 24th/25th April, 1966 (Census night) in this household, and each person who usually lives in this household but spends Census night elsewhere, and each person who arrives in this household next day (Monday) before noon and who has spent the night travelling.

Persons to be included

- (i) Everyone who usually lives in the household must be included on the census form whether they are present or absent on Census night, 24/25th April.
- (ii) Visitors spending Census night in the household should be included, also those who arrive on Monday morning (25th April) having spent Census night travelling.
- (iii) Do not include any absent family member who usually lives at another address (for example, a son who has left home and is living in lodgings or a person living permanently in an institution such as an old people's home or who has lived there for the past six months).

At Question 1 the formfiller was asked to write down the names of everyone to be included, and then Question 3 asked whether each person was present or absent on census night. Question 4 dealt with whether each person was a usual resident or a visitor.

The count of all those recorded as 'present' at Question 3 gave the *de facto* household data; and the count of all those usually resident at this particular household space (Question 4) gave the *de jure* household data. In most cases all the usual residents were present on census night and there were no visitors; the *de jure* and *de facto* households were then identical. However, the situation was not always so straightforward. Some members of the *de jure* household

may have been away on census night; or there may have been some visitors staying with the usual residents. In some household spaces *all* the persons present may have been visitors, either because all the usual residents were away, or because that particular household space was no one's usual residence.

It is arguable that the 1966 Census gained in accuracy over previous censuses because the formfiller was able to include anyone he felt should be included, without any harm being done, since the extra questions meant that ineligible people could be excluded later. Some ineligible people, who were both absent on census night and not usually resident at the address, were in fact put down on forms and were removed by GRO during the editing. Such editing was not possible in 1961 and earlier censuses, as there had been no question about presence or absence.

In the 1966 Census, the only household space for which there was no information at all was a usual residence where the usual residents were all away on census night and there were no visitors. Apart from this minor deficiency in the *de jure* figures, the 1966 Census provided the opportunity to do all analyses of households and their housing in terms of the *de jure* household. But the opportunity was not taken up as only the household composition tables were done in this way.

3.2 Fundamental errors affecting the household statistics

The division of the population into 2 sections, institutional and non-institutional, was in part decided at the sampling stage when certain addresses were designated 'large institutions'. For other, generally small, institutions the distinction depended mainly on the enumerator, but also to some extent on editing carried out by GRO. The enumerator's instructions define institutional premises as 'all establishments in which some form of communal catering is provided for the people in them, such as hotels, holiday camps, hospitals, religious communities, boarding schools, prisons, H.M. Forces establishments, etc. (Inns and hotels without sleeping accommodation for guests are not institutions but will often contain private households)'.

A few more small institutions were then created by GRO's editing procedure, whereby 'if a household contains 5 or more persons described as boarders, lodgers, patients, foster-children or employees (staff) not in domestic service, it should be converted into an institution of the appropriate non-private type'.

We found one small hotel with rooms to let but no guests, which GRO treated as a private household but which we have treated as a small institution. On the other hand GRO treated as small institutions 2 inns and one public house which had no rooms to let and should have been treated as private households of 4, 3 and 3 persons. Unfortunately we did not follow through the effects of these 3 errors and they are not allowed for in what follows.

The fundamental errors which we shall now consider are those arising because a household was omitted, because the wrong household was included, or because a group of households was wrongly treated as a single household. For this particular sample census it is convenient to deal with the errors under 2 heads: firstly, those arising due to incompleteness of the sampling frame, and secondly, those due to faulty treatment of a sample address. About the first of these we can only make some general observations, since it was excluded from our terms of reference.

(I) INCOMPLETENESS OF THE SAMPLING FRAME

Non-coverage is one of the most difficult things to measure on a full census, and it becomes even more difficult to measure on a sample census. GRO mounted a special inquiry to measure the non-coverage of permanent buildings. It did not attempt to cover vagrants, nor did it attempt to cover small caravan sites containing only one or 2 caravans; for both of these categories had been excluded from the sample census. Since these categories account for less than one in a thousand people, this was a small loss.

The sample for the GRO coverage check consisted of one small plot, estimated to contain about 15-20 households, selected at random in each census district. Consequently each plot had a chance of selection inversely proportional to the expected number of households in its census district, which probably varied by as much as 30 to 1. The census officer then visited the plot and listed all the households living in it. GRO then compared these lists with the sampling frame listing; the results of this comparison will be found in the Great Britain Summary Tables, page XXI. It is suggested that about 1% of the population was not covered by the sampling frame.

This investigation suffered from 3 deficiencies:

- (i) The probabilities with which the plots were selected varied, so that considerably different weights had to be applied, resulting in high sampling errors;
- (ii) The boundaries of the plots were only settled in detail after selection;
- (iii) Matching the descriptions of addresses obtained in the coverage check with those recorded 5 years previously in 1961 caused difficulties.

One suggestion we would like to make for any future coverage check is that some use be made of the Electoral Register. If a comparison were made between the households enumerated and the Register, any clues as to missing households could be followed up on the ground.

In 1966 no attempt was made to collect the census characteristics of the households that had been missed. Had this been done it would have been possible to add in an appropriate sample to the 'omitted household' column of our tables (see for example Table 3.1), thereby completing the picture. Perhaps this could be done on a future occasion.

(2) FAULTY TREATMENT OF SAMPLE ADDRESSES

(a) *Wrongly Included or Omitted Households*

Our Quality Check operation brought to light 60 households that had been wrongly omitted and 59 households that had been wrongly included in the census due to faulty treatment of sample addresses, a net addition of one household. Although the net effect in terms of households is negligible, these 119 households cannot be ignored since some of the characteristics of the omitted households may differ from those of the wrongly included ones. So in presenting our results the characteristics of omitted and wrongly included households will be shown separately as fringes to the main tables. (See for example Table 3.1, page 35).

Why were such fundamental mistakes made and how did they arise? We shall consider the errors in 2 groups, firstly those which would not occur on a full census, and then those which might equally well occur on a full

census. Nearly two thirds of the errors fall into the first category of those peculiar to this sample census.

Because the addresses taken from the 1961 Census records were sometimes out of date, inaccurate, or inadequate, the enumerator did not always find the right address, but enumerated a wrong building instead. Where, for example, the selected building had been demolished since 1961 and a new building erected on the site, the enumerator sometimes wrongly delivered a form to the new building, which thereby received 2 chances of selection, once incorrectly in this way and once correctly from the rating records. Renumbering of streets also led to the wrong building being enumerated. Partly because the 1961 Census records had never been designed to be used as a sampling frame, the address and description recorded there was not always sufficiently detailed to enable an enumerator to identify the building 5 years later. For example, one enumerator went to a Rose Cottage in the wrong street in 1966 because the address given was inadequate. If any future census is to be used as a sampling frame, the records should be designed with this in mind and the enumerators must be encouraged to make detailed, accurate and legible records. In copying the selected addresses from the 1961 records illegibility caused a few mistakes, in that some enumerators were given wrong or non-existent addresses. But the inadequacies of the 1961 records were not the only source of trouble; some addresses selected from the rating records also caused trouble. For example, one new house on an estate was described as Plot 31 in the rating records, but the enumerator went to No. 31, a completely different address.

As a result of going to these wrong buildings, 28 households were omitted and 33 households were wrongly included. None of these errors would occur on a full census, nor would those where GRO failed to assess correctly the chance of selection which some households had received in the enumeration. Six households were wrongly rejected by GRO during the processing because they were thought to have received more than one chance of selection, when in fact they had only had one chance. On the other hand 11 households were included by GRO which should have been rejected because they had had more than one chance of selection.

So far we have been dealing with errors peculiar to this sample census, but one third of the errors were nothing to do with the sampling procedure and could easily occur on a full census. In this group of errors most of the omitted households had been recorded as 'Absent', when in fact someone had been present on census night. This was the most common fault, but a few addresses described as vacant, non-residential, or even demolished had had occupants. Recording households as absent is an easy option for the enumerators, but this temptation could be removed by asking them to return after census day and obtain details of any households completely absent on census night. Errors also occurred in the opposite direction. Some households were incorrectly recorded as present when all their members were absent, and a few households were even enumerated at addresses which were really vacant or non-residential. For example, one family completed a form because they were still the legal tenants of the house although they had moved and were living elsewhere.

All in all, as we have said, 59 households had been wrongly included and 60 wrongly omitted. Had it been possible we would have added to these 60 households any households discovered in the GRO coverage check.

(h) *Two or More Households Treated as One*

One of the most serious errors affecting household characteristics, though having no effect on the characteristics of individuals, arises because 2 or more households are entered on one census form as a single household. We found 60 such erroneous 'households', which, when correctly subdivided, produced a total of 131 genuine households, a net increase of 71 households (a 1·4% increase). In presenting our results we shall show the effects of these errors by giving in the fringes of our main tables the characteristics of these 60 erroneous households and their 131 genuine counterparts (see for example Table 3.1, page 35).

We shall show that these fundamental mistakes in applying the household definition were not only the major source of error in both the *de facto* and the *de jure* household size, but a serious source of error in all the census housing tables, because splitting an erroneous household unit affects every statistic relating to households. For example, one erroneous household with 6 rooms may be replaced by 2 genuine households with 3 rooms each; and an owner occupier may be replaced by one owner occupier and one tenant; one erroneous household having exclusive use of the bath may be replaced by 2 households sharing a bath. Splitting erroneous households has had a greater effect on some statistics than have all other types of error together, particularly on those relating to shared amenities. By grouping several householders on one form, the enumerators often contributed more to the total error than all the formfillers who gave wrong answers to the census question. Why did the enumerators permit these mistakes to be made, and how can they be prevented in a future census?

Two-generation families give rise to some errors. A young married couple living with their parents may buy their own food and cater separately, thus constituting a separate household, but the whole family is entered on one household form. Similarly an elderly parent or parents living with their married children may be an independent unit, although one form is completed for all of them. Brothers and sisters sharing accommodation also cause some problems. Approximately half the erroneous households consisted of such cases of related people, who shared accommodation but catered separately. The other errors concerned unrelated groups, where sub-tenants were put down on their landlord's form, although they catered for themselves. They were usually described as 'hoarders' on the census form although occasionally another term such as 'friend', 'tenant' or 'lodger' was used in Question 2 to describe their relationship to the head of the census household.

Although the enumerator had been told to identify each separate household, there were no clear instructions on exactly what questions he should ask to do so. Furthermore we know that in about a third of cases the enumerator did not speak to anyone in the household at the delivery stage; forms were put through a letter box or left in a communal hall. And this is likely to continue.

The best chance of dealing with this problem is at the collection stage, when the recognition of potentially troublesome categories, such as hoarders and two-generation families, is much easier. Wherever the situation appears at all complicated on the form the enumerator can ask what arrangements are made for providing meals for each person. Special checks* need to be made

*In the 1968 census pre-test an attempt was made to get the enumerators to do this, but with limited success.

where the form shows:

- (a) any 'boarder', 'tenant', or 'lodger',
- (b) any married sons or daughters living with parents,
- (c) any parents or in-laws living with their married children,
- (d) any group of 'friends' sharing a flat.

If a mistake has been made the enumerator will have to issue a new form and amend his records, so space should be provided at the bottom of each page of his record book for making amendments.

Because the household is such an important unit in the census, enumerators must be taught to apply the definition correctly. A serious amount of error remained in 1966 even though the effort devoted to getting across the household definition was considerably greater than in previous censuses. No one knows the magnitude of the error in previous censuses but it is likely to have been larger than in 1966.

We will now consider how these fundamental and other errors affect the *de facto* household size.

3.3 'De facto' household size

Provided the enumerator had issued schedules to the correct groups of people, the accuracy of the *de facto* household size depended on the answers to Question 3 and the associated Notes.

- 3.
3. If the person spends Census night here or is out on night work or arrives next morning after travelling overnight write "Present". If spending the night elsewhere whether or not arriving next morning write "Absent" and the address where he or she is staying on Census night. (See Notes.)

3.

Question 3—Present or Absent on Census Night

- (i) Write 'Present' for all people who spend Census night here. Members of the household who are out on night work should also be marked 'Present'. So should anyone who arrives before midday on Monday having spent Census night travelling.
- (ii) Write 'Absent' only for household members who are spending Census night away from home (other than on night work). For example, write 'Absent' for a schoolboy who lives at home during the holidays but is now away at boarding school or for anyone temporarily away on his job, on holiday or in hospital (including a new-born baby).
- (iii) For people marked 'Absent' write also the full postal address of the place where they are staying on Census night. If the precise address is not known write the name of the town or village where the person is staying. For anyone temporarily absent abroad write the name of the country.

Tahle 3.1 which deals with the errors in the size of *de facto* households, is the first of a series of tables of similar layout, so it will be described in some detail. The upper part of the table gives the raw data which have been used to calculate the correction factors given in the lower part of the table for each category of household size.

In the upper part of the table the central block gives the results for the 5,120 cases where the basic household unit is not in dispute, while the fringes give the results where the wrong basic unit has been used. The central block shows for each *de facto* household the number of persons present on census night according to the census and the number present according to the Quality Check. Thus the 5,096 households falling on the diagonal represent agreement on the *de facto* size classification while the remaining 24 represent a misclassification. In terms of the total 5,120 *de facto* households in the central block the 24 misclassifications amount to a rate of only 0.5%* and can be shown to have little effect on the average household size.

The fringes to the central block show the effects of the more fundamental errors previously described in section 3.2(2). The 60 erroneous census units in the first row below the central block can be shown to have an average size of 4.4 persons, compared with an average of 2.0 persons for the 131 genuine households into which they should have been subdivided and which are shown in the first column to the right of the central block. This is the group of errors which most seriously affects the total count of households and the average household size.

The second row below the central block gives the sizes of the 59 households wrongly included in the census, while the second column to the right of the central block gives the sizes for the 60 households wrongly omitted. The net effect of these wrong inclusions and omissions upon the average household size is however small.

Finally the extreme margins show the overall effect of all the errors. The 5,239 households that the census recorded had 15,529 persons shown as present on census night, compared with the 5,311 households with 15,519 persons that should have been counted; this represents a 1.4% increase in households but a negligible 0.01% decrease in persons.

Ratios derived from the extreme margins of the upper part of the table could be used to give an estimate of the correction factor needed for each household size group. Calculated in this way, the largest ratio would be 1.077 for single person households, this figure being obtained by dividing 955 by 887. However, in making our corrected estimates in column (a) of the lower part of the table, we have used a more elaborate estimation procedure which makes greater use of the detailed data in the upper part of the table. A full description of the method of estimation will be found in the Appendix†. The complete range of Quality Check estimates given in the lower part of the table can be used to calculate a corrected average household size of 2.94 persons, which is 0.04 less than that derived from the census figures.

How did the various errors arise? We do not need to discuss the origins of the fringe errors, since they have already been dealt with at length in section

*All our tables will show a percentage calculated in this way which we shall call the misclassification rate.

†Sampling errors are given in this table. They have not been calculated for all our tables, due to the laborious nature of the calculations involved.

Table 3.1. The accuracy of *DE FACTO* HOUSEHOLD SIZE

Mark-Hartree ratio = 0.5%		1966 CENSUS - <i>DE FACTO</i> HOUSEHOLD SIZE											Number of persons present at census		Accuracy of <i>de facto</i> household size according to quality check					
		Number of persons present at census																		
		One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten or more									
QUALITY CHECK	One	870	1													871				
	Two	5,1564				2										51571				
	Three		1058	2												1059				
	Four			3,847	1											3,851				
	Five				1,407											1,408				
	Six					1	204									207				
	Seven						2	78								81				
	Eight							1	40							42				
	Nine								17							18				
	Ten or more									18						18				
<i>Sub-total where census used to correct household size*</i>		875	1585	1056	850	412	207	79	41	17	18	5120								
																131				
																6311				
<i>Census used to test really households more than one household</i>			17	12	10	8	13	4	1							60				
<i>Households wrongly included in the non-pair-test</i>			12	18	14	8	5	3	1							59				
GRAND TOTAL of households with reference to census		887	1592	1082	868	425	233	84	42	17	19	5239								

* Households are households of 10 people, where the census assumed 11.

England and Wales

FROM THE 1966 CENSUS TABLES	Published figures (a)	QUALITY CHECK		Correlation factor (b) + (c)
		Estimate ¹ (a)	%	
Number of persons present at census:				
One	2,559,090	2,562,000 ± 38,000	16.5	1.085
Two	4,694,900	4,798,000 ± 33,000	30.8	1.022
Three	3,262,270	3,230,000 ± 20,000	20.7	0.990
Four	2,716,960	2,701,000 ± 19,000	17.3	0.994
Five	1,330,940	1,318,000 ± 17,000	8.5	0.989
Six	607,450	575,000 ± 13,000	3.7	0.943
Seven	211,640	208,000 ± 8,000	1.4	0.982
Eight	94,760	96,000 ± 5,000	0.6	1.034
Nine	43,900	47,000 ± 3,000	0.3	1.069
Ten or more	38,220	36,000 ± 2,000	0.2	0.942
Total <i>de facto</i> households	15,359,680	15,569,000	100.0	
Average household size (census)	2.98	2.94		

* For method of estimation, see Appendix.

3.2(2); so we will confine our attention to the origins of those errors represented by the non-diagonal elements of the central block of the table.

Altogether 27 people were omitted from 18 households, 17 of which are immediately visible below the diagonal of our table. The remaining household is hidden in the diagonal, because the largest size group in our table, and in any published census statistics, consists of 'ten or more' persons. In this case the formfiller had put down himself, his wife and 9 children, but had 'forgotten grandma', the twelfth member of the household.

Five formfillers left visitors off their forms, most of them because the form had been filled in before census night and nobody thought to add, as a visitor, some friend or relative who stayed unexpectedly. Another formfiller left 3 people off because they were moving next day, so 'it wasn't worth putting them down'. Other reasons given for omissions were: 'they are not part of my family', 'I thought only adults needed to be included', and 'he was under 5'. The sources of these misunderstandings are that people confuse household with family, that part of the form only applies to adults, and that some questions do not apply to the 'under-fives'.

Some omissions were due to the enumerators not being sufficiently careful. For example, one enumerator had crossed through a column on the H form and added a note, 'Does not live here'. While true in the sense that the man had married and left home, he had in fact stayed with his parents as a visitor on census night. In another case, where the enumerator had filled in the form, a child was omitted because 'the man did not ask about her'.

Some people were wrongly recorded as absent in Question 3. For example, one householder gave the address of his factory, because he was working there overnight. Another erroneous absentee was in the process of moving out of a flat he had been sharing, but did in fact spend census night there.

An interesting reason given for the omission of people from some of the larger households was that there was not enough room on the form. When more than 6 spaces were needed the enumerator was supposed to issue 2 forms to the household, but this did not always happen; so the formfiller had then the alternatives of either squashing all the people on to one form or leaving the extra people out. Thus it seems likely that the number of omitted persons in a census will be related to the number of spaces provided on the census form. We shall return to this subject in a later section where we shall consider additional evidence from other censuses.

We have so far been discussing the 17 households with too few persons shown as present; they are partly balanced by 7 households, in which 12 absentees had been wrongly recorded as present. Among these cases was a man who recorded his wife and children as present, although they were away on census night, because 'the place where they were staying did not have a census form', i.e. the address was not in the 10% sample. In another case a child who had left home was probably recorded as present because his mother still hoped that he would come back. Wishful thinking may also explain why one family included their children who had been taken into the care of a local authority.

Because, as we have seen, the errors occur in both directions, the net effect of errors in the central block of the table is small in terms of persons and households, with the result that the average household size is scarcely affected. The big effect, as we have said, comes from the fringes of the table. The

overall error of 0·04 in the average *de facto* household size is perhaps best put into perspective by comparing it with the change between censuses.

AN INTER-CENSAL COMPARISON

Published census figures for the average household size are of course based on persons present, i.e. on the *de facto* household.

Average number of persons present per <i>de facto</i> household	Census (England and Wales)		
	1951	1961	1966
	3·19	3·04	2·98 (2·94)
			← Published figures ← Quality check

Taken at their face value the published figures show a reduction of 0·15 in the average size between 1951 and 1961 and then a further reduction of 0·06 by 1966. Thus the magnitude of the error we have found corresponds to about a 3 year change.

It would be unwise to assume that the error was of the same magnitude in each of the 3 censuses. 1966 may well be the most accurate, as the 1966 enumerators received more training and their written instructions emphasized the household definition in the description of the sampling procedure. The magnitude of the error will also have been affected by the different treatment of absentees and even, as we shall suggest later, by the number of spaces on the census form.

3.4 'De jure' household size

Most people carrying out surveys involving households use a *de jure* definition similar to that on page 27, so we shall consider the accuracy of the *de jure* household size. So far the only use GRO has made of the *de jure* household is in the Household Composition Tables. In 1961 they used the normal definition but in 1966 decided to modify the definition in order to make the analysis easier. The new definition was "the number of persons whose usual address was 'Here' in Question 4, less any people subsequently coded" as domestic servants". We shall however stick to the more normal definition which includes domestic servants, since we think this will be of greater use and interest to our readers.

Table 3.2 shows the accuracy of *de jure* household sizes. Unlike the other 'error' tables of this part of the report, it is based on 'usual residences' and not on *de facto* households. The base numbers in the central block and the fringes differ from those in other tables because some *de facto* households were enumerated in spaces that were not usual residence spaces, and because the census failed to get a form completed if there was no one present on census night at a usual residence.

This latter group of 78 usual residences are to be found in the first column to the right of the central block. They are the survivors of 102 cases in the Quality Check sample where the enumerator had recorded an 'absent household'. In 11 cases he had been wrong because someone had been present on census night; these we have treated as wrongly omitted households, which we

*Table 41 of the 1966 Household Composition Tables shows that there were 64,510 domestic servants in 0·4% of households.

Table 3.2. The accuracy of DE JURE HOUSEHOLD SIZE

Macclausification
diff. $\frac{76}{5752} = \pm 4\%$

1966 CENSUS - DE JURE HOUSEHOLD SIZE														
Number of persons usually resident														
Q U A L I T Y C H E C K	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten or more	Sum of persons usually resident and 4 persons whose address was not known at census	Sum of households with 4 persons whose address was not known at census	Sum of households with 4 persons whose address was known at census	Grand total of de jure households according to census
	827	3		1							831	47	60	21 969
	10	566	13								1589	19	37	20 1665
	Three		5 1025	11							1041	6	12	9 1067
	Four			6 862	6						874	5	9	3 891
	Five				5 410	3					414	2	9	3 429
	Six					3 189	3				195		2	2 200
	Seven					1 377					82			1 83
	Eight						1 38				39			1 40
	Nine							1 19			21			21
Total where census used as correct usual residence	837	1574	1047	873	422	196	80	39	19	16	5103	78	129	60 5370
Census used if usual residence consisting of more than one dwelling unit		11	12	11	7	12	4	1	1	1	59			
Usual residences wrongly classified	10	17	14	8	5	3	1				58			
GRAND TOTAL of usual resi- dences according to census	847	1602	1073	882	434	211	85	40	19	17	5320			

* Includes one household of 12 people, where the census counted 11.

Detailed and Revised

FROM THE 1966 CENSUS TABLES		QUALITY CHECK			Correlation factor ($r_1 - r_2$)
Census/estimate used	Published figures (r_1)	Estimate ¹ (r_2)	%		
Number of persons usually resident:					
One	2,301,490	2,634,000 \pm 39,000	16.7	1.145	
Two	4,731,320	4,914,000 \pm 33,000	31.1	1.039	
Three	3,271,040	3,250,000 \pm 26,000	20.6	0.994	
Four	2,750,050	2,744,000 \pm 25,000	17.4	0.998	
Five	1,322,390	1,309,000 \pm 17,000	8.3	0.985	
Six	583,070	583,000 \pm 15,000	5.5	0.948	
Seven	207,600	205,000 \pm 8,000	1.3	0.988	
Eight	92,250	93,000 \pm 5,000	0.6	1.008	
Nine	42,830	48,000 \pm 4,000	0.3	1.121	
Ten or more	37,500	35,000 \pm 2,000	0.2	0.933	
Total usual residences	16,339,540	15,778,000	100.0		
Average household size (published)	2.98	2.92			

¹ For method of estimation, see Appendix.

have already mentioned. In another 13 cases there were no usual residents, since they involved second residences. Thus only 78 out of the 102 appear in the table. Calculation shows that the average household size for this group is low, at 1.7, so this group of what amounts to non-response on the census has some effect on the average *de jure* household size. Indeed it is the existence of this group that makes the error in the average *de jure* household size 0.02 greater for the *de facto* household size.

Apart from this group, the main contribution to the error in the average comes from the same group of wrongly amalgamated households which affected the *de facto* average. The central block of the table, where the usual residence is not in dispute, shows that 1.4% of *de jure* households were assigned the wrong number of usual residents by the census, a rather higher proportion than in the case of the *de facto* household classification; but once again the errors balance and have no appreciable effect on the average size. Overall the Quality Check estimates produce an average *de jure* household size of 2.92, which is 0.06 less* than that derived from the census figures.

Once again we do not need to discuss the origins of the errors in the fringes of the table since we have already dealt with them. We shall look at the 74 errors in the central block of the table. About half these errors concerned cases specifically dealt with in the notes associated with Question 4.

4. If the person usually lives here, write "Here"; if not write the usual address in full. (For people living away from home, children at boarding school, students, members of H.M. Forces etc. See Notes.)

4.

Question 4—Usual Address

- (i) For school children, students, etc., who live away from home during term, give the home address and not the term time address.
- (ii) (i) For members of H.M. Forces who live in married quarters give the address of the married quarters.
 - (2) For members of H.M. Forces who do not live in married quarters—if they live on the station give the address of the station; if they 'live out' give the living out address.
- (iii) For people present on Census night who live away from home during the week give the address from which they usually go to work, but if the head of the household lives away from home during the week write 'Here' for the usual address.
- (iv) For people with no settled address write 'None'.
- (v) For boarders who have a settled address with this household write 'Here'.

*0.05 less than the figure used in the Household Composition Tables, which excluded domestic servants.

Students and children at boarding school caused 11 errors because their term-time address was given at Question 4, instead of their home address as required by note (i). In 9 households the head was in H.M. Forces and stationed away from his family, but he had been put on the form and GRO had coded him as usually resident, contravening note (ii)(2). In 24 cases grown-up sons or daughters working away from home had been recorded as usually resident with their parents, contravening note (iii).

Two formfillers made mistakes in quite straightforward cases and put 'Here' as the usual address for ordinary visitors. Eight formfillers left absentees off the form because 'it was only for people who were here that night'. One absentee was omitted because 'we did not know all the information about her'. Other misunderstandings about who should be included caused 9 formfillers to omit people actually present on census night, but these omissions have already been dealt with in the previous section.

Some elderly people living with their children still claimed their own home as their usual address. Some wives were unwilling to admit that their husbands had left them. Some common law husbands and wives were described as visitors. The legal tenant of a council flat filled in the form and showed himself as usually resident although he had not lived in the flat for over a year.

In all 35 households* omitted a member and 40 households wrongly included someone.

COMPARISON WITH THE FAMILY EXPENDITURE SURVEY

The 1966 Family Expenditure Report† gives an average *de jure* household size‡ of 3.03 persons for households in the United Kingdom which co-operated in this budget keeping inquiry. A further report, as yet unpublished, uses data collected from the non-cooperating households§ to suggest that the true average size of *de jure* households for the United Kingdom is 2.91 (based on a sample of 4,353 households). Unfortunately no separate results are available for England and Wales, but one may use census data to make a correction of -0.02 to allow for Scotland and Northern Ireland. Thus the FES yields an estimate of 2.89 compared with our Quality Check estimate of 2.92 persons per *de jure* household. The reader should note that the FES is not a typical interview survey in a number of respects, being a record-keeping inquiry with a fairly high non-response. Another way in which the FES is untypical is that cooperating households are paid for their help so that the effects of non-response may well be different.

3.5 'De jure' versus 'de facto' household size

Readers interested in the difference between *de jure* and *de facto* households should study Table 3.3 which is based solely on the Quality Check data.

*One is concealed in the diagonal of the table, see page 36.

†H.M.S.O.

‡The main difference between the Social Survey definition of a household and the census *de jure* version is that the census treats schoolchildren over 16 and students living away from home as usually resident at home, whereas the Social Survey does not. This will make the average household size smaller for Social Survey, but we have not attempted to estimate by how much.

§Information about non-cooperating households is likely to be somewhat less reliable than information from fully cooperating households. Furthermore no allowance had been made for non-coverage of addresses missing from the Electoral Registers.

Table 3.3. Comparison of *de jure* and *de facto* household sizes, based on Quality Check data

		DE JURE HOUSEHOLD SIZE										England and Wales				
		Number of persons usually resident*										All usual residence spaces				
		One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten or more	Other spaces	All houses with permanent or transient residents			
P E R A C T O H O U S E H O L D S S I Z E	Number of persons present at census	One	8885	44	7	3	1					943	12	956		
		Two	221542	51	2	1						1625	3	1628		
		Three	1	44	970	47	7	1				1070	2	1072		
		Four		4	23	809	25	1				862	2	864		
		Five		1	4	6	20	382	8			421		421		
		Six			1	3	4	8	195	8	1	210		210		
		Seven				1	3	2	73	2	1	82		82		
		Eight				1	1		1	2	38	2	43		43	
		Nine						1			16	1	18		18	
		Ten or more								1	2	15	18		18	
		Sub-total	8117	1646	4052	888	426	200	83	40	21	16	5292	19	5311	
		No one	47	19	5	5	2						78			
		All usual residence spaces	959	1885	1067	891	428	200	83	40	21	16	5370			

* Including domestic servants.

Providing there had been no errors, the census housing statistics would be based on 5,292 out of the total of 5,370 usual residence spaces plus 19 spaces which are not the usual residences of any households. Over two-thirds of this latter group* consists of students whose usual residences are defined as being at home (Note (i) to Question 4). The omission of 78 usual residences occurred because no one was present at these residences on census night.

Of the 5,292 usual residence spaces included, 4·0% had fewer people present on census night than the usual number of residents. On the other hand 2·9% had more people present on census night than the usual number.

Thus, leaving aside any errors in the data, users of the census tables, which analyse such things as rooms, tenure and amenities by household size, may often fail to realise on what the tables are based. The tables omit 1·5% of usual residence spaces, include a further 0·4% of non-usual residences and, where they do use a usual residence space, take a household size which differs

*This group is proportionately somewhat too large in the Quality Check sample due to the chance selection of Cambridge as one of our census districts.

Table 3.4.

Some Estimates of Household Size

England and Wales

Number of persons in household	CENSUS 'DE FACTO'				CENSUS 'DE JURE'			
	Uncorrected		Excluding domestic servants		Uncorrected ^a		Including domestic servants	
			De Jure Check	%			De Jure Check	%
One	2,389,090	15.4	2,562,000	16.9	2,323,940	15.1	2,301,190	15.0
Two	4,684,900	30.6	4,788,000	30.6	4,722,800	30.6	4,731,320	30.9
Three	3,262,270	21.2	3,230,000	20.7	3,285,070	21.3	3,271,040	21.3
Four	2,716,460	17.7	2,701,000	17.3	2,750,500	17.9	2,750,050	17.9
Five	1,330,940	8.7	1,316,000	8.5	1,320,400	8.6	1,322,390	8.6
Six	607,450	3.9	573,000	3.7	579,470	3.8	583,070	3.8
Seven or more	389,570	2.6	389,000	2.5	377,380	2.6	380,180	2.6
Total	10,359,680	100.0	10,569,000	100.0	10,339,540 ^b	100.0	10,339,540 ^c	100.0
Average size (residents per household)	2.93		2.94		2.97		2.98	% 2.92

^a Adjusted from census. This does not include the households completely absent on census night.^b Table 1 of the Household Composition volume.^c Calculated on the basis of Table 4 of the Household Composition volume.

from the usual number of residents in 6.9% of cases. Readers may well feel, as we do, that the tables ought to be based only on usual residences and the usual numbers of residents, i.e. on the *de jure* household size. There seems to be a good case for changing the basis of these tables, particularly if some attempt were made to collect information about as many as possible of the 1.5% of households completely absent on census night.

Finally for ease of reference we have collected together in Table 3.4 some estimates of household size.

3.6. Rooms

Question 24 dealt with the household's rooms and was the first question on the back page of the H form. As more space was available on the back page, the notes for this and subsequent questions were printed, albeit in small type, above the appropriate question or block of questions. The accessibility, but small print, of the notes relating to Question 24 and subsequent questions is in marked contrast to Questions 1-23 where, because of a lack of space on the form itself, the notes had to be included in a separate leaflet, and where the actual print of the notes was larger than in the questions themselves.

24. Rooms

Include all living rooms, bedrooms and kitchens whether or not at present in use. Include a scullery if it is used for cooking.

Do not include a bathroom, toilet, closet, landing, lobby or recess; a scullery which is not used for cooking; a store-room, office, shop or any other room which is used solely for business purposes.

A large room which can be divided by a sliding or folding fixed partition should count as two rooms.

A room which is divided by curtains or portable screens into separate sections (e.g. for living and sleeping) should count as one room. Prefabricated extensions should also count as rooms if regularly used for living, eating, sleeping or cooking.

(a) How many rooms are there in your accommodation?

.....

(b) How many of these rooms are a kitchen or a scullery?

.....

(c) How many of the kitchens or sculleries shown at (b) are regularly used for breakfast or any other meal?

.....

The 3 parts of the question were designed to produce counts of a household's rooms according to 2 different definitions of an acceptable room. The figure given in answer to part (a) corresponded to a new definition introduced in 1966 for the first time but another figure, corresponding to the old 1961 definition, could be derived from (a) plus (c) minus (b), i.e. by eliminating those kitchens and sculleries which were not regularly used for meals. In

introducing the new definition GRO sought to avoid some of the anomalies that occurred when applying the old definition to pairs of households such as the following. Consider first a household that has few rooms and is therefore forced to eat meals in the kitchen; here, with the old definition, the kitchen would be counted. But a kitchen of a similar size will not be counted for a similar household which, because it has more space, does not eat in its kitchen. So the more overcrowded household would be credited with a room while the less overcrowded household would not. Because of cases like this a new definition was introduced in 1966, but the old one was retained in order to preserve comparability with earlier censuses.

Changing the definition was not, however, the only departure from previous practice. Whereas in 1961 the responsibility for obtaining and recording the number of rooms had rested with the enumerator in all cases, by putting Question 24 on the H form in 1966 the responsibility for this item was transferred to the householder, except in the case where a dwelling was shared*. Although in 1966 the householder did a little better than the enumerator had done in 1961 the results are not very encouraging.

Table 3.5 shows the errors and correction factors for the new 1966 definition of an acceptable room based on the answers to part (a) of the question. The correction factors range from 1.523 for households with only one room down to 0.814 for households with 8 rooms. For households with the smaller numbers of rooms a large part of the correction arises from the subdivision of cases where the census had counted 2 households as one. Where however the household itself was correct, the central block of the table shows that 16.7% of such households were credited with an incorrect number of rooms. How did this happen?

The basic problem seems to be that every householder knows how many rooms he has according to some definition of his own, and he therefore ignores the census definitions. For example, 5% of households had counted a bathroom and/or a toilet, in spite of the instructions to the contrary. Evidence from another inquiry† suggests that many people would count a bathroom as a room if not given a definition. But every instruction was at some time contravened. Rooms divided by curtains or pieces of furniture were sometimes counted as 2, while properly partitioned spaces were occasionally counted as one. Box rooms, attics, small bedrooms, unused rooms, rooms used for storage, prefabricated extensions, all these were on occasion omitted. Rooms used for business purposes, halls and landings, wash houses, and rooms sublet, all these were wrongly counted. A number of kitchens and sculleries were omitted from this part of the question because they were going to be counted in part (b), and the formfillers felt they should only be counted once. Perhaps in designing forms one should allow for this, in many ways, praiseworthy reluctance to count anything twice.

With such a large error in the answers to part (a) of the question (16.7% of the correctly identified households were misclassified) it would be surprising if the number of rooms according to the 1961 definition did not show a larger error since it depended not only on part (a) of the question but on parts (b)

*For details of what the enumerator had to do, see the copy of his instructions in the Appendix.

†Following this post enumeration survey we carried out a special study in Glasgow in which, among other things, we asked householders what rooms they had, without giving any definition. Of those with a bathroom, 80% gave it as a room.

Table 3.5. Accuracy of Question 24:
ROOMS (1966 definition)

		1966 CENSUS - ROOMS (1966 definition)												
		Number of rooms occupied												
QUALITY CHECK	Number of rooms occupied	One	89	2	1								90	
		Two	11	109	10	4							134	
		Three	2	13	281	36	6	4	1				343	
		Four		2	32	921	93	14	8				1054	
		Five			9	55	174	159	15	4		1	1457	
		Six			1	6	82	129	65	12	3		1428	
		Seven				1	3	53	252	58	4	3	350	
		Eight					6	11	95	14	4	130		
		Nine						1	4	8	29	8	50	
		Ten or more						1	1	2	4	54	62	
Sub-total where census used a correct household unit		102	126	335	1062	1360	1501	351	159	54	70	3120		
Census used a unit which contained more than one household		2		1	7	14	13	7	7	4	5	60		
Households strongly included in the non-part-unit		1	5	2	18	12	17	3			1	59		
GRANDE TOTAL of households units according to census		105	131	338	1087	1380	1531	361	166	58	76	3239		

FROM THE 1966 CENSUS TABLES		QUALITY CHECK			England and Wales	
Characteristics used	Published figures (x)	ESTIMATE (x)	%	CHI-SQUARE (x)	(x) + (x)	
Number of rooms occupied (1966 definition)						
One	210,820	321,000 ± 13,000	2.1	1.523		
Two	352,130	430,000 ± 24,000	2.8	1.244		
Three	977,280	1,097,000 ± 33,000	7.0	1.123		
Four	3,056,810	3,081,000 ± 52,000	19.8	1.008		
Five	4,078,420	4,377,000 ± 88,000	25.1	1.073		
Six	4,888,110	4,559,000 ± 61,000	29.3	0.953		
Seven	1,021,160	1,048,000 ± 52,000	6.7	1.028		
Eight	452,550	352,000 ± 22,000	2.3	0.814		
Nine	161,810	135,000 ± 21,000	0.9	0.634		
Ten or more	180,590	158,000 ± 14,000	1.0	0.664		
Total de fuita households	15,359,880	15,584,000	100.0			

¹ For method of estimation, see Appendix.

and (c) as well; and of the households, correctly identified, 7·3% had an error at (b) and 12·0% an error at (c). But the increase in error was not as large as the component parts of the question would suggest because, although parts (b) and (c) sometimes added another error to the error already there in (a), quite often they cancelled an error in (a). So in quite a lot of cases GRO got the right answer from their sum, i.e. (a) - (b) + (c), although the component parts were wrong.

The results of the 1966 Quality Check on rooms obtained by using the 1961 room definition are shown in Table 3.6. Once again it will be seen that the largest correction factor of 1·544 is for households with one room. The misclassification rate for households in the central block of the table has risen to 22·6%, compared with the 16·7% in the previous table for the new room definition.

What caused the additional errors in parts (b) and (c)? The intention of the question arrangement was that any room given in (c) should already have been given in (b) and that any room given in (b) should already have been given in (a), but this idea failed to get across to many formfillers. We think that some of the trouble arose because the formfiller could not imagine how GRO was going to use the answers. How was he to know that GRO would perform the sum (a) - (b) + (c) to arrive at the number of so-called habitable rooms?

Sometimes things were wrongly included in answer to (b) which had been correctly excluded from (a), such as sculleries which were not cooked in. The instructions above the question had been taken as only applying to part (a) and since part (b) asked specifically about sculleries, any scullery was given. Sometimes part (c) had been answered in terms of the number of rooms in which meals were eaten, so that (c) wrongly included a dining or living room which the formfiller had been correct in not counting in part (b). Sometimes part (c) had been answered in terms of whether meals *could* be eaten in the room even though in practice they were not eaten there.

Altogether the formfillers made heavy weather of Question 24, but lest anyone thinks that the enumerators have in the past done any better we present our evidence on the size of the error in the 1961 Census. On that occasion the responsibility for obtaining details of the number of rooms had been placed entirely on the shoulders of the enumerator, but he was required to enter the information on the household form in a space with the very ambiguous heading shown on page 48.

Following as it did immediately after a block of questions which the householder had to answer, many householders clearly felt that they were invited to fill in the number of rooms, which, as the handwriting shows, they certainly did on many occasions, but without the benefit of any instructions defining a room, since these were only to be found in the enumerators' handbook. Add to this the number of occasions where the enumerator will have assumed* that the people in a house had the same number of rooms and the same kind of eating habits as the people in the house next door, and it is small wonder that our investigations suggest that in 1961 a very high proportion of households were credited with the wrong number of rooms.

*With the greater workloads involved in 1961 it seems likely that enumerators will have made even fewer contacts with the formfiller than in 1966, where we found that in 21% of households the enumerator had not talked to anyone in the household either at the delivery or collection stage.

Table 3.6.

Accuracy of Question 24:

ROOMS (1961 definition)

Classification
note: 1183 = 22.6%
5120

		1966 CENSUS - REQUIRED (1961 definition)										Sub-totals where census and a correct household unit			
		Number of rooms occupied													
		One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten or more				
R E A L I T Y C H E C K	Number of houses occupied	One	122	19	1	4	3						148		
		Two	9	177	35	7	2		1				231		
		Three	6	23	43	95	14	3	1				572		
		Four	2	2	82	1017	173	18	6		1		1301		
		Five	1		11	122	1444	205	12	3			1798		
		Six		1		9	102	524	54	10	2	1	703		
		Seven				5	33	145	29		2		212		
		Eight				2	1	13	50	9	2		77		
		Nine				1		2	3	20	6		32		
		Ten or more						1	4	3	37		45		
Sub-total where census used in correct household unit		139	222	560	1264	1746	734	233	99	35	48	5120			
													131		
													60		
													5311		

Correct used & not easily extending more than one percentage	2	1	2	10	18	9	10	4	1	3	60	
Households wrongly included in the answer-unit	1	6	6	17	17	9	2			1	59	
GAINED TOTAL of households with recording in excess	142	229	568	1281	1738	802	245	103	36	52	5239	

England and Wales

FROM THE 1966 CENSUS TABLES	QUALITY CHECK			Correlation factor (%) = (%)
	Published figures (%)	Estimated (%)	%	
Number of rooms occupied (1961 definition): One	321,210	496,000	3.2	1.644
Two	656,520	794,000	5.1	1.209
Three	1,642,860	1,728,000	11.1	1.052
Four	3,707,760	3,882,000	24.9	1.047
Five	5,423,860	5,506,000	35.4	1.015
Six	2,428,760	2,144,000	15.8	0.883
Seven	688,600	608,000	3.9	0.883
Eight or more	490,110	410,000	2.6	0.837
Total of single households	15,309,680	15,568,000	100.0	

¹For method of estimation, see appendix.

How the room information was recorded in 1961

M	<p>Has this household the use of the following in the building? Write "Sole use" if used only by this household, or "Shared" if shared with another household, or "None". See Note 10.</p> <p>(a) Cold water tap</p> <p>(b) Hot water tap</p> <p>(c) Fixed bath</p> <p>(d) Watercloset (in the building or attached to it)</p>				
<p>Information to be given to the enumerator</p> <p>Whether sharing stove and sink in shared dwellings</p> <p>Number of rooms</p> <p>Number of Persons</p> <table style="margin-left: auto; margin-right: auto;"><tr><td style="width: 50%;">Males</td><td style="width: 50%; text-align: right;">Schedule No.</td></tr><tr><td>Females</td><td></td></tr></table>		Males	Schedule No.	Females	
Males	Schedule No.				
Females					

Of the 3,950 households in buildings which existed in 1961 and where the living space was apparently comparable with that in 1966, as many as 39% were assigned a different number of rooms in 1961 to what we believe to be the true position in 1966. Part of this difference will of course be due to people moving, changes of habit and the like, but we think that it does point to a very large error in 1961, and one that was larger than that found in 1966.

Social Survey experience has shown that to determine a household's rooms according to the census definition requires a whole battery of questions. It is clearly going to be very difficult to arrive at accurate data using census techniques.

3.7 Tenure

Question 25 on the census form dealt with tenure. The layout of the question and the instructions can be seen on the next page. Now although the instruction at the beginning of the question says firmly, 'Answer "Yes" to only one of the questions (a), (b), (c), (d), (e) or (f) or give details at (g)', the 6 tenure categories (a) to (f) are not mutually exclusive. It is possible for a household to occupy accommodation 'by virtue of employment', (c), and

still be paying rent to a private landlord or company, (e) or (f), or to a local authority, (d). One of the 3 answers, (d), (e) or (f), might also be an alternative for a household renting its accommodation with a shop, (b). In these cases the formfiller could legitimately answer 'Yes' to more than one of the 6 categories (a) to (f). Naturally some did so. Where this happened, GRO instructed the coder to give priority to the highest category on the list. Thus there seems to be an underlying assumption in the design of the question that the

Questions on Tenure

1966 Census

25. Ownership and renting

Answer "Yes" to only one of the questions (a), (b), (c), (d), (e) or (f) or give details at (g).

Notes

If the house, flat, etc., is occupied on a lease which was originally granted for at least 21 years, or has since been extended to 21 years or more write "Yes" at (c). For shorter leases answer one of the other parts.

If the accommodation is provided in connection with the employment of a member of your household and ceases to be provided after the employment comes to an end (e.g. tied cottage, caretaker's flat) write "Yes" at (c) whether rent is paid or not.

Does your household occupy its accommodation (house, flat, rooms, etc.)—

- | | | |
|---|-------|---|
| (a) As owner-occupiers (including purchase by mortgage)? | ..... | 0 |
| (b) By renting it with a farm, shop, or other business premises? | ..... | 1 |
| (c) By virtue of employment? | ..... | 2 |
| (d) By renting it from the Council or New Town Corporation or Commission? | ..... | 3 |
| (e) By renting it unfurnished from a private landlord or company? | ..... | 4 |
| (f) By renting it furnished from a private landlord or company? | ..... | 5 |
| (g) In some other way? Please give details | | |

formfiller would read the categories (a) to (f) in the order in which they are printed on the form and write 'Yes' beside the first one that was applicable. Unfortunately, where such a choice was open to the formfiller, he did not always choose the highest one, as the Quality Check shows.

The results of the Quality Check are given in Table 3.7. In the upper part of the table we show the 7 groups into which GRO coded the answers. In all cases where a formfiller had given an answer at (g) the household had been

1961 Census

L

State how this household occupies its accommodation (house, flat, rooms, etc.) by writing "Yes" at (a), (b), (c), (d) or (e) or by giving details at (f).

See Note 9.

(a) As owner-occupants _____
(including purchase by mortgage)

(b) By renting it with a farm, shop
or other business premises _____

(c) By virtue of employment _____

(d) By renting it from the Council
or New Town Corporation _____

(e) By renting it from another landlord—
furnished _____
or
unfurnished _____

(f) In some other way—please give details:

Note 9 which appeared on the back of the 1961 Schedule

9. Ownership and Renting. (Panel L)

Leaseholds. If the household occupy their house, flat, etc. on a lease which was originally granted for more than 21 years, or has since been extended for more than 21 years, write "Yes" at (e). For shorter leases answer one of the other parts of the question in Panel L.

By virtue of Employment. If the accommodation is provided in connection with the employment of a member of the household and ceases to be provided after the employment comes to an end (e.g. a tied cottage, caretaker's flat) write "Yes" at (c) whether rent is paid or not.

Table 3.7.

The accuracy of Question 25:
TENURE

Standard deviation
rate: $\frac{175}{220} = 2.5\%$

		1966 CENSUS - TENURE						Standard deviation rate: $\frac{175}{220} = 2.5\%$
R U A L I T Y S K E C K	Owner occupied (including purchases by migrant)	Owner occupied (including purchases by migrant)		Rented from local authority or private landlord or company		Sub-total where owned used or current household unit		
		Owned with family or other business partners	Rented with family or other business partners	By owner of employment	Rented from local authority or private landlord or company	Unsubsidized	Furnished	
Owned with family or other business partners	2257	2	1	1	7	1	1	2270
Rented with family or other business partners		46	2	1	9			58
By owner of employment		1	189	6	30			226
Rented from local authority or private landlord or company	2	1		1412	10			1425
Rented from a private landlord or company	6	4	10	7	685	13	1	926
Furnished	1				10	203	1	215
Sub-total where owned used or current household unit	2266	54	202	1427	951	217	3	5120

Owner used a unit recently containing more than one household	34		2	6	12	6		60
Households wrongly included in the ten-per-cent	25	4	8	4	14	4		58
STANDARD TOTAL of households units according to census	2325	58	212	1437	977	227	3	5239

England and Wales

FROM THE 1966 CENSUS TABLES		QUALITY CHECK		Correction factor (M - m)
		Estimated (m)	%	
Owner occupied	7,169,600	7,189,000 ± 28,000	46.2	1.003
Rented from local authority or private landlord or company	3,941,830	3,942,000 ± 20,000	25.3	1.000
Rented from a private landlord or company	2,935,090	2,911,000 ± 53,000	18.7	0.992
Other houses (not residential)	526,370	684,000 ± 37,000	4.4	1.295
Total of ratio households	15,359,830	15,572,000	100.0	1.075

¹For method of estimation, see Appendix.

assigned by GRO to one of the categories (a) to (f). Question 25 is one of the census questions where a 'Not stated' category was permitted by GRO in coding the answers but the number in the 'Not stated' category, as quoted in the published census tables, is misleading. We had in our sample 24 cases where Question 25 had been left blank, but in 21 of these GRO had followed its usual practice and assigned these to one of the categories (a) to (f), leaving only 3 cases to be coded 'Not stated'.

The lower part of Table 3.7 shows that in the published census tables the 7 categories into which the answers were coded have been combined into 5 groups in an incorrect way. The first 4 groups are (a), (d), (e) and (f), in that order. The fifth and last group is entitled 'Other tenures and not stated', and is made up of those coded to categories (b) and (c) together with those allowed to remain as 'Not stated'. 'Other tenures and not stated' does not properly describe the group, because it suggests that the fifth group could not be assigned to the preceding 4 main groups. In fact (b) and (c) had originally had priority over (d), (e) and (f) in the coding and editing and, by implication, in the question itself.

The largest correction factor of 1.300 is for the group of households renting their accommodation furnished from a private person or company; this error arises, not from the tenure question itself, but from the fundamental error of 2 households being put on one census form. In many cases of this nature, splitting up the people on the form correctly into 2 households produced one household renting its accommodation furnished from the other. The only other appreciable correction factor is for the 'Other tenures and not stated' group.

Of the 5,120 cases where the census had correctly identified the household, 2.5% were assigned to the wrong tenure code. Over a third of the errors arose, because the formfiller had a choice of possible answers and had not chosen the highest in the list. This accounts for the 2 groups of 9 and 30, who were recorded as renting unfurnished privately when they should have been given as renting with a farm, etc., and by virtue of employment. A further 6 shown as renting from the council should have been by virtue of employment.

In the 13 cases where lettings that were really unfurnished had been given as furnished according to the census, most formfillers could not account for the mistake. One commented that she 'thought she had put it on the right line'. Probably these cases were a slip of the pen, but confusion may have arisen from the very similar wording of categories (e) and (f), which are distinguished solely by the prefix un- situated in mid-sentence. A slip of the pen certainly accounts for most of the 10 cases where the tenure was wrongly given as rented unfurnished from a private landlord or company, when it should have been given as rented from the council, etc. There is a clear case for improving the layout of the question.

Some of the 10 cases, which were recorded as unfurnished but should have been furnished, may have arisen in the same way, but most are cases where the furniture, although legally sufficient to constitute a furnished letting, was considered inadequate by the formfiller.

Then there were 10 cases where the accommodation was occupied by virtue of previous rather than present employment, and 6 cases where the household did not own its accommodation but occupied a relative's house rent free. Some subtenants of council tenants were wrongly classified as renting from the council, and there was some trouble with leases.

There was an interesting example of how, in striving for more accuracy, one may produce less. In 1966 the words 'or Commission' had been added to (d) to cover the case of a New Town Commission. This led to the wrongful inclusion in (d) of some tenants of the Crown Commissioners.

The enumerators were responsible for some errors. One enumerator had 'only asked if the house was unfurnished', which it was, but the householder was in fact the owner.

THE VALIDITY OF THE INTERCENSAL CHANGE

The figures given below show the apparent intercensal change, but they need to be used cautiously.

TABLE 3.8
Tenure—The intercensal difference, 1961-1966

England and Wales

TENURE	1961 Census		1966 Census
	Published figures	Published figures	Quality Check
Owner occupied	6,192,766	7,169,600	7,189,000
Rented with farm, shop, etc.	197,596	786,790*	174,000
By virtue of employment	707,663		672,000
Rented from local authority, etc.	3,472,027	3,941,830	3,942,000
Rented unfurnished from a private person or company	3,492,112	2,935,090	2,911,000
Rented furnished from a private person or company	578,733	526,370	684,000
Total de facto households	14,640,897	15,359,680	15,572,000

*We estimate that this consists of approximately 167,000 rented with farm etc., 611,000 by virtue of employment, and 3,000 not stated.

Although at a casual glance the 1966 Census question on tenure appears to be the same as that used in 1961, a closer look reveals an important difference in layout. Furthermore the answers have been handled differently at the coding stage. The change in layout had been made because of trouble experienced in 1961 with the privately rented furnished and unfurnished categories. The reader will note (page 50) that in 1961 the formfiller was asked to write 'Yes' at (a), (b), (c), (d) or (e) or, failing that, to give details at (f). But (e) reads:

(e) By renting it from another landlord—
furnished _____
or
unfurnished _____

Although there were 2 dotted lines, one alongside furnished and the other alongside unfurnished, the word 'or' appears between furnished and unfurnished. This 'or', together with the instruction to write 'Yes' alongside (e), must for many people have given the impression that there was a composite class, 'furnished or unfurnished'. As a result large numbers of formfillers had put a 'Yes' on the upper dotted line, when really they rented their

accommodation unfurnished. Because of this the furnished group was seriously over-estimated*, according to the 1961 General Report (page 167), and requires correction by a factor of about 0.81, which would reduce the published figure of 578,733 to about 469,000. But this still does not allow for the type of error found in 1966 which, although it was not measured in the 1961 post-enumeration survey, certainly occurred at least as frequently in 1961 as it did in 1966; this is the error that results from 2 households being treated as one. So in the end one is still uncertain as to whether or not the furnished sector grew during the 5 years between these 2 censuses.

We have already commented on the composition of the category 'other tenures and not stated', of which the largest component was the group coded to 'By virtue of employment'. With this latter group there appears to have been a change in coding practice between 1961 and 1966 with regard to the specified answers. The 1961 Housing Volume states: 'where a person obtained the accommodation by virtue of his employment, but had since retired from or left that employment, the household should still have been included in this category'. However the 1966 coding instructions for the specified answers leave no doubt that the intention was not to include such cases in the 'By virtue of employment' category.

Because of the unsatisfactory nature of the 'other tenures' group, we have reallocated its contents to the 3 remaining renting groups on the basis of the information collected in the Quality Check.

Rented from a local authority, etc.	40,000
Rented unfurnished from a private person or company	722,000
Rented furnished from a private person or company	84,000
	<hr/>
	846,000

Here of course the term 'rented' is extended to include 'rent free'.

3.8 Household amenities

Question 26 dealt with the 3 amenities, hot water, flush toilets, and baths and showers. The question is reproduced in full to show the arrangement of the various parts and the instructions as the formfiller saw them. The approach used was to ask whether the household had the use of an amenity within the building and then to ask whether it was shared with another household. The exception to this was the fixed shower, where sharing was not explored.

*Part II of the 1961 Housing Tables refers to the results of the 1961 post-enumeration survey, and says: 'the overstatement of the numbers renting furnished is statistically significant'. But in fact this is not the only significant difference. Readers should note that incorrect significance tests were used in this and other 1961 volumes, being tests which would have been appropriate had the 2 sets of observations been based on 2 independent samples. More appropriate tests allowing for the lack of independence, were subsequently used in the General Report.

26. Household amenities

In the following questions—

a hot water tap means a tap within the building and connected to any form of heating appliance (e.g. boiler, tank with immersion heater, geyser, etc.) which in turn is connected to a piped water supply;

a water closet means a flush toilet emptying into a main sewer, septic tank or cesspool. It does not include a chemical closet or earth closet;

a fixed bath means a bath permanently connected to a water supply and with a waste pipe leading outside the building;

a fixed shower means a shower permanently connected to a water supply and with a waste pipe leading outside the building;

(a) Has your household the use of a hot water tap within the building? Write "Yes" or "No" _____

(b) If "Yes" is it shared with another household? Write "Yes" or "No" _____

(c) Has your household the use of a water closet (W.C.) with entrance inside the building? Write "Yes" or "No" _____

(d) If "Yes" is it shared with another household? Write "Yes" or "No" _____

(e) Has your household the use of a water closet (W.C.) with entrance outside the building (e.g. in the garden, backyard or lane)? Write "Yes" or "No" _____

(f) If "Yes" is it shared with another household? Write "Yes" or "No" _____

(g) Has your household the use of a fixed bath within the building? Write "Yes" or "No" _____

(h) If "Yes" is it shared with another household? Write "Yes" or "No" _____

(i) Has your household the use of a fixed shower within the building? Write "Yes" or "No" _____

The 3 amenities will now be considered in turn, commencing with hot water.

(1) HOT WATER

The question dealing with the household's hot water supply consisted of parts (a) and (h) of Question 26 which is reproduced above. Part (a) of the question asked about 'the use of a hot water tap within the building' but the instruction in small print above the question extended the meaning of the term 'hot water tap' to cover appliances, such as a geyser, which in ordinary parlance would not be thought of as constituting a hot water tap. Part (h) of the question dealt with whether the amenity was shared with another household.

The errors in the published census figures for hot water are shown in the lower part of Table 3.9, where estimated correction factors are given for the classification used in the published volumes. The largest correction factor is 2.043 for households sharing the use of a hot water tap. The greater part of

Table 3.9.

The accuracy of Questions 26(a) and (b):
HOT WATER

Misclassification
rate: $\frac{170}{5135} = 3.3\%$

<i>Count were 1 and ready occupying more than one household</i>	44	7	9	60
<i>Households wrongly registered in the two-pair-unit</i>	50		8	58
<i>GRAND TOTAL of Household units according to census</i>	4463	114	662	5239

Environ Monit Assess

FROM THE 1986 CENSUS TABLES		QUALITY CHECK		Descriptive factor (a)–(d)
Characteristic used	Published figures (a)	Estimate [†] (b)	% (c)	
With less water loss	Exclusive use	13,116,490	13,295,000 ± 39,000	86.4 1.014
	Shared use	317,250	648,000 ± 55,000	4.2 2.043
With no less water loss		1,925,940	1,627,000 ± 54,000	10.4 0.845
Total de Áreas boschadas		15,359,680	15,570,000	100.0

[†] For methods of evaluation, see Appendix.

this correction is necessary because more than one household was wrongly put on one census form; had this not occurred the correction factor would have been much smaller, i.e. approximately 120 divided by 107, or about 1.12. On the other hand the correction factor of 0.845 for households with no hot water tap arises largely because of the misclassification of the hot water amenity for households that had been correctly identified.

We now consider the reasons why 3.3% of the correctly identified 5,120 households were misclassified, taking the error cells in turn from the central block of Table 3.9, starting with the largest.

The largest error cell in the table consists of 93 cases where we decided the household had exclusive use of a hot water tap but the census classified the household as having no hot water tap. In most of these cases the instruction above the question to count various appliances as hot water taps had not been read. The appliances concerned were gas geysers, immersion heaters and electric water heaters. Occasionally the 'etc.' in the instruction was not understood. One formfiller had had 4 attempts to answer (a) and finally got it wrong; the form shows ~~NO~~ YES YES NO, and we found he had an electric water heater. In 6 cases the formfiller had left (a) and (b) blank, perhaps because he could not decide what to answer, and the answer was imputed incorrectly. In another 2 cases the enumerator had filled in the wrong answer. Did he ask the question as at (a) on the form? We think he should have asked, 'How do you get hot water?' If he departed from (a) then he had to devise his own question.

The second largest cell of errors arose in the same way. In the 27 households where the census says there is no hot water tap, we found there to be a shared geyser or electric heater. Of these cases the enumerator was responsible for filling in the answer in at least 5.

The third largest cell of errors in the table consists of 22 households said by the census to be sharing a hot water tap but who in fact had exclusive use of such a tap. Among them were 3 cases where the household definition, or lack of it, had caused trouble and the amenity was merely shared by the formfiller's household, e.g. 2 sisters catering together as one household. (These 3 households bob up again with errors for other amenities in Question 26). There were 2 cases of flats where the hot water supply was shared with the whole block but there was an exclusive tap for the flat. In 2 cases the enumerator was responsible for the error. The remaining 14 cases consisted mainly of households with exclusive use of hot water at one point, usually the sink, and shared use of a hot water tap in the bathroom. The reason for this group of errors is easily seen. Parts (a) and (b) of Question 26 do not cater adequately for those households which have not only a tap for exclusive use but also a shared one. Part (b) asks, 'If "Yes" is it shared with another household?', without saying which one 'it' is, and the question then firmly instructs the formfiller to 'write "Yes" or "No"'. The formfiller very reasonably assumed that Question 26(b) wanted to know about the shared one.

The fourth largest error cell of 16 households contained a few cases of form-filling difficulty to which we shall refer later. There were some ineligible appliances such as an old fashioned range with a side boiler and tap, and some gas boilers into which one had to pour cold water, and there was the inevitable bath tap, labelled hot, from which no water flowed.

The next largest cell of 10 contained one form filled in by someone outside the household and another filled in by the enumerator, but generally this

group arose from formfilling difficulties, some of which are given below. Before doing so we ought to mention the smallest error cell in the table; this involved 2 households who anticipated the installation of a gas geyser which they were to share.

A pair of questions such as (a) and (b), where (b) should be answered only if (a) is YES, offers some scope for wrong combinations. YES YES, YES NO, and NO BLANK are acceptable according to the instructions, but GRO had frequently to cope with NO NO, NO YES, BLANK BLANK, and quite a number of second attempts, e.g. YES NO, YES. All 18 cases where both (a) and (b) were blank were treated by GRO as 'no hot water tap'. This was correct in 12 cases but wrong in 6, as we have already seen. It is as well to remember that although a blank to a question often means "I haven't got it", it may mean "I don't know how to fill this in". Other formfilling difficulties were as follows:

(a)	(b)	
NO	NO punched by GRO as YES	NO (twice), but should be NO BLANK
NO	YES punched by GRO as YES	NO but should be NO BLANK
NO	YES punched by GRO as NO	BLANK but should be YES YES
YES	NO YES punched by GRO as YES	NO (twice), but should be YES YES
Only Bath	YES punched by GRO as YES	NO but should be YES YES

The 2 cases of YES NO; YES punched as YES NO are an interesting example of punchers not seeing a crossing out.

THE INTERCENSAL DIFFERENCE

The 1961 Census question dealing with hot water was part (b) of panel M and this is reproduced on the following page.

Clearly the 1961 Census sought to classify households in exactly the same way as in 1966 with regard to the supply of hot water, but the form of question and the position of the instructions were different. There was no dependent question dealing with sharing as there was in 1966; the formfiller had to write 'sole use' or 'shared' against '(b) Hot water tap'. Thus the formfiller was left in the same dilemma as in 1966 if he had the sole use of one hot tap but also shared another. However the really important difference was that the instructions defining what was meant by hot water tap were given on the back of the form in 1961, but were included with the question itself in 1966. We have already shown how often the instructions were not read even when they appeared with the question itself; they were therefore even less likely to have been read in 1961 when they were given on the back of the census form. Thus an appreciable part of the reduction in the number of households with no hot water tap between 1961 and 1966 shown by the published census figures is probably unreal and a result of redesigning the question. Again the apparent increase in shared hot water taps between 1961 and 1966 is almost certainly unreal, reflecting only the better application of the household definition in 1966, which probably by reducing the cases where 2 or more households were incorrectly entered on one census schedule produced more sharing households, and thus more households sharing a hot water tap.

M

Has this household the use of the following in the building?
 Write "Sole use" if used only by this household, or
 "Shared" if shared with another household, or
 "None".

See Note 10.

- (a) Cold water tap
- (b) Hot water tap
- (c) Fixed bath
- (d) Waterclosets (in the building or attached to it)

10. Household Arrangements. (Panel M)

- (a) Cold water tap. This refers to a tap within the building. It does not include a tap in an open yard or a public standpipe. If only the latter are available, the answer "None" should be given.
- (b) Hot water tap. This means water piped to any form of heating appliance which will allow hot water to be drawn from a tap within the building, e.g. a boiler, tank with immersion heater, geyser, or sink heater.
- (c) Fixed bath. This means a bath permanently installed with a waste pipe leading outside the building. It does not matter for this purpose whether there is water piped to it or whether the room where it is installed is used only as a bathroom or not.
- (d) Watercloset. This means any watercloset emptying into a main sewer, septic tank or cesspool. It does not include a chemical closet or earth closet. It must be within the building or attached to it.

e.g., For a household which shares the use of a fixed bath and watercloset, and has the sole use of the cold water supply but has no hot water supply the entries would be:-

- (a) Cold water tap—Sole use. (c) Fixed bath—Shared.
 (b) Hot water tap—None. (d) Watercloset—Shared.

TABLE 3.10
 Hot water—The intercensal difference, 1961–1966

England and Wales

	1961 Census Published figures	1966 Census	
		Published figures	Quality Check
With hot water tap	Exclusive use	11,176,465	13,395,000
	Shared use	257,844	648,000
With no hot water tap		3,206,588	1,627,000

(2) FLUSH TOILETS

Parts (c) to (f) at Question 26 dealt with flush toilets. Part (c) asked about 'the use of a water closet (WC) with entrance inside the building', and part (e) asked a corresponding question about one 'with entrance outside the building (e.g. in the garden, backyard or lane)'. Parts (d) and (f) dealt with whether these amenities were shared with another household. One instruction relating to toilets was given in the introduction to the amenity questions, in the middle of the block of instructions for the different amenities; it was in small print. It points out that a 'water closet means a flush toilet emptying into a main sewer, septic tank or cesspool. It does not include a chemical closet or earth closet'. The layout of the questions and instruction can be seen on page 55. By now a formfiller with these amenities and a hot water supply will have written Yes or No six times in answer to Question 26; and there are still 3 more parts to the question.

The results of the Quality Check are shown in Table 3.11. The upper part of the table shows the results for all 9 possible classifications which were punched by GRO and are available on the computer tape. In the lower section we give estimated correction factors for the 5 classifications retained in the published census tables. As with the other amenities the largest correction factors are for the groups of households sharing these amenities and arise mainly because more than one household was wrongly put on the census form. The group of households with no water closet has a correction factor of 1.094, but this could be misleading for anyone concerned with local figures. For on closer examination we find that the group of 23 households classified wrongly as having exclusive use of an outside water closet are almost entirely in rural areas, while the counterbalancing error cells consist of households almost entirely in urban areas. Thus in rural areas, where the genuine 'no water closet' households occur, the correction factor required could be as high as 1.2.

From the upper part of the table it can be seen that, where we consider the census to have identified the households correctly, we find that they have been misclassified on the full nine-point classification in 4.3% of cases. This falls to 2.5% for the five-point classification used in the published tables.

Probably the most serious group of errors are the 23 households claiming to have exclusive use of an outside flush toilet, who in fact have only an earth or chemical closet or in one case a waste water closet. The term 'water closet (WC)' was not always understood. Although the instructions say that a water closet 'does not include a chemical closet', 3 formfillers said they thought a chemical closet was a WC. In 2 cases the enumerator had changed a NO in answer to part (e) into a YES; in another case a formfiller had had doubts and done the same. Would it not be better to use the more expressive term 'flush toilet' in the question itself? Is it wise to leave a group of households with no place on the form to indicate that they have a toilet?

The next largest cell of errors in the table affecting the classification used in the published table are the 19 households who appeared on the census form as having exclusive use of both an inside and an outside water closet, but who in fact had only the use of an outside one. A few are cases of the same toilet being counted twice. There was, for example, one toilet which was entered by going out of the house into the wash-house and entering from there; being in doubt as to whether the entrance was inside or outside the building the

Table 3.11.

The accuracy of Questions 26(c), (d), (e) and (f):
FLUSH TOILETS

Classification
 no. 220 = 4.3%
 5120

(This reduces to 2.5%
 for the classification
 used in the published
 tables.)

			1966 CENSUS - FLUSH TOILETS									
			WITH INSIDE water closet				WITH OUTSIDE water closet ONLY					
			Exclusive use		Shared use		Exclusive use		Shared use			
D	O	C	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use
E	I	S	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use
R	A	N	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use
E	C	H	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use
X	M	N	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use	Exclusive use	Shared use
			604	31		72	1	6		1	645	
			5	6	3						13	
			23	2	18	1	4	6	1	4	316	
			6		10	1	2	2			21	
			2	1	2	21	11		1	4	42	
			1	10	4	3	184		1	1	204	
			15		10		1	767	3	2	802	
			6		1		2	1	4	105	4	117
								23		86	111	
			665	10	316	15	29	204	808	111	102	5120
			<i>Sub-classified where census used a current household unit</i>									
			<i>Counted used at just one randomly selected place over more than one household unit</i>									
			<i>Households wrongly included in the non-permanent</i>									
			<i>GRAND TOTAL of households where according to census</i>									
			<i>683 10 3245 15 29 214 803 114 106 5120</i>									

		Census and ratio				Deviation factor ($f_1 + f_2$)	
From the 1966 Census Tables		Position (f_1)		Census ^a (f_2)			
Gross/Double unit		Position (f_1)		% ($f_1 - f_2$)			
WITH INSIDE water closet	Exclusive use	11,655,270	11,522,000 ± 47,000	74.0	0.985		
	Shared use	633,050	944,000 ± 69,000	6.1	1.491		
WITH OUTSIDE water closet	Exclusive use	2,484,690	2,422,000 ± 37,000	15.6	0.983		
	Shared use	292,410	380,000 ± 30,000	2.4	1.300		
WITH NO water closet		274,260	300,000 ± 28,000	1.9	1.094		
Total all factor households		15,359,680	15,588,000	100.0			

^a For method of estimation, see Appendix.

formfiller counted it twice. But most of this group represent sheer inability to cope with the form. As one formfiller said, she 'was confused by all that talk about WCs'.

Generally with the mistakes on this question there was an unusually large number of cases where we were simply told that the recorded answer was a mistake or the formfiller was puzzled how he had come to put the answer. There is some evidence to suggest that people gave up at this point in Question 26 and wrote NO to everything, including the questions on baths and showers which followed.

Some of the other errors involve a difference of opinion as to whether a water closet was shared. There was for example the household which normally used the outside toilet but switched to the inside when it was 'wet and windy'. As with the other amenities some of the 'sharing' recorded was within the household.

Two of the largest error cells in the table do not affect the published tables but are nevertheless of some methodological interest. First there are the 31 cases where the census recorded only the exclusive use of an inside water closet, but where we say they had both an inside and an outside toilet. Some of these outside toilets had not been treated as such because formfillers thought that an 'entrance outside the building' meant that the whole toilet should be structurally separate from the building. The part of the question in brackets, (e.g. in the garden, backyard or lane), had been taken, not unreasonably, as applying to the whole structure rather than just the entrance. The group also included some outside toilets which were seldom used.

The second group consists of 29 cases where the census recorded the exclusive use of both an inside and outside water closet, but where there was no outside one according to us. Those who had 2 inside toilets felt that the GRO must want to know about the second one somewhere, and so answered YES to the outside toilet. One formfiller said he was certain he had put 2 inside toilets on the form! Also in this group are those with only one toilet but where the toilet has 2 entrances, one inside and one outside; quite reasonably these toilets appear twice on the census forms.

THE INTERCENSAL DIFFERENCE

The question asked in 1966 was in no way comparable with the 1961 question (see page 59) which asked whether the household had sole or shared use of a 'water closet in the building or attached to it'. Thus in 1961 water closets not attached to the building were not counted at all. The 1961 Census Volume* on Housing is incorrect on this point. It says: "the post-enumeration survey (1961, not this one) indicates that the number of households returned as being without a water closet is understated the number of such households was at least 1.5 million compared with the number returned of 1,008,802". This is not so, because the 1961 Census did not ask about households with any kind of water closet; it was concerned only with households who had the use of a water closet 'in the building or attached to it'.

Even more misleading are the 1961 table headings, one of which reads 'Water Closet, Entirely without'. No such thing was measured. Thus users

*1961 Census Housing Tables Part II, Tenure and Household Arrangements, Page XII.

of the census volumes are misled into thinking that between 1961 and 1966 the number of households without a water closet fell from about 1·5 million to 274,260. Nothing of the sort has occurred. The 1961 Census figure of 1·5 million relates to households without a water closet 'in or attached to the building' and though it includes the households completely lacking a water closet, it includes a lot of other households as well.

(3) BATHS

The last amenity dealt with in Question 26 was the bath or shower. Part (g) of the question asked about 'the use of a fixed bath within the building' and part (i) asked about 'the use of a fixed shower within the building'. Part (h) dealt with whether the bath was shared with another household. There was no corresponding question about sharing a shower. The layout of the questions can be seen on page 55. Two instructions appeared in small print in the introduction to the block of amenity questions. They required a fixed bath or shower to be 'permanently connected to a water supply and with a waste pipe leading outside the building'.

All 6 possible combinations of answers to the 3 questions were coded by GRO but only 3 have been used in the published tables, where the shower has been ignored. The results of the Quality Check are shown in Table 3.12 with estimated correction factors for the published classifications. Once again, as with the other amenities, it is the sharing households which have the largest correction factor, 1·514. It is of course mainly due to more than one household being wrongly put on one census form.

Taking into account all 6 possible answers, 1·7% of the correctly identified households were misclassified. The proportion falls to 1·2% for the classifications used in the published tables. These misclassification rates are the lowest for the 3 amenities dealt with in Question 26, i.e. hot water, flush toilets, and baths or showers.

The largest cell of errors in our table consists of the 23 households recorded on the census form as having exclusive use of a bath and with no shower, whom we decided had neither amenity. In almost all these cases a bath failed to qualify because it was not 'permanently connected to a water supply' although it had a 'a waste pipe leading outside the building'. Now the definition of a fixed bath is contained in the instruction above the question, which defines it as one 'permanently connected to a water supply and with a waste pipe leading outside the building'. We think that the word 'fixed' adequately dealt with the waste pipe requirement without the need for reading the instructions on that point. Failure to read the instructions however meant that some form-filers recorded baths which were not permanently connected to a water-supply.

The second largest error cell affecting the published tables consists of the 12 households who were shown as having exclusive use of a bath which we decided was shared. In the main these are households who also made mistakes with the sharing of toilets.

The third largest error cell consists of 10 households whose form showed no bath or shower but who in fact had exclusive use of a bath. Apart from one formfiller who had put NO because the bath had no hot water tap, the remainder seem to be cases where, from the toilet part of Question 26 onwards, NO was put in answer to everything. In some cases the enumerator was responsible.

Table 3.12.

The accuracy of Questions 26(g), (h) and (i):
BATHS and SHOWERS

Divisional Totals:
 Rate = $\frac{66}{520} = 1.2\%$
 (The ratios lie 1-2% for the characteristics used in the published tables.)

QUALITY CHECK	With fixed bath	Exclusive use		Shared use		Sub-total where census used a correct enumeration method
		With shower	No shower	With shower	No shower	
		With shower	No shower	With shower	No shower	
With shower	115	17				132
	8	3937		4		3949
Shared use	1		5	1	1	8
			12	266		272
With no fixed bath					3	3
			23	3	1	746
<i>Sub-totals where census used a correct enumeration method</i>		124	3939	5	263	5120

1966 CENSUS - BATHS AND SHOWERS						
		With fixed bath		With no fixed bath		Sub-total where census used a correct enumeration method
		Exclusive use	Shared use	With shower	No shower	
	With shower	115	17			132
	No shower	8	3937	4		3949
	Shared use	1		5	1	8
	With no shower			12	266	272
	With shower				3	3
	No shower			23	3	746
<i>Sub-totals where census used a correct enumeration method</i>		124	3939	5	263	5120

Reliability where method fixed showering or shower and bathing or bath and shower	4	136
Reliability wrongly included in the new year count	8	4007
	6	15
101	11	384
		3
16	4	765
131	60	5311

Census used a year newly occurring where there was a break	3	39		11		7	60
Reliability wrongly included in the new year count	1	45		5		8	59
TOTAL TOTAL of households units according to census	128	4073	5	279	5	749	5239

FROM THE 1966 CENSUS TABLES		QUALITY CHECK			England and Wales	
Classification used	Published figures (a)	Estimated (b)	%	Correlation factor (b) - (a)		
With fixed bath	Exclusive use	12,397,470	$12,222,000 \pm 37,000$	78.5	0.995	
	Shared use	666,520	$1,009,000 \pm 54,000$	6.5	1.514	
With no fixed bath		2,295,880	$2,334,000 \pm 29,000$	15.0	1.017	
Total of known households		15,359,880	$15,565,000$	100.0		

^aFor method of estimation, see Appendix.

As we have said the published tables ignore the shower. This is perhaps just as well, for the census forms showed only 5 households without a bath but having a fixed shower, and 2 of these were wrong. Although GRO never had any intention of using the shower question to do more than pick out this small group, formfillers generally had trouble deciding what constituted a fixed shower. Did a shower having a flexible hose fixed to the tap assembly of a bath constitute a fixed shower? We decided it did, but formfillers were divided on this. A shower, having a flexible hose with rubber fittings which could be temporarily pushed on to the bath taps, was not in our view a fixed shower, but not all formfillers agreed with this. A protest of this question would, we think, have prevented valuable schedule space and coding time being wasted on the shower.

3.9 Cars and garaging

Question 27 was the last question on the census form, and was headed 'Cars and garaging'. All the notes provided were given with the question, which is reproduced below.

27. Cars and garaging

- (a) How many cars, including vans, taxed wholly or in part as private vehicles, are owned or used exclusively by you and members of your household?
 (See Notes below)
 If none, write "None".

Notes

Include car or van provided or subsidised by members' employers for business or pleasure and used exclusively by members of your household.

Do not include—

cars or vans taxed wholly as goods vehicles or lorry-cargoes;
 cars or vans owned by members of your household but not used by any member of your household;
 cars or vans belonging to visitors.

- (b) For each car or van entered at (a) show where it is normally kept overnight by writing "Yes" at (i), (ii), (iii) or (iv), or by giving details at (v). If there are more than two vehicles give answers here for only two of them.

	1st vehicle	2nd vehicle
(i) In a garage or carport within the grounds of your dwelling	1
(ii) In a garage or carport elsewhere	2
(iii) Within the grounds of your dwelling but not in a garage or carport	3
(iv) On the road, street or verge	4
(v) Elsewhere—please give details	5

Part (a) of the question dealt with the number of cars and vans used by the household, while part (b) dealt with garaging.

(I) PRIVATELY TAXED CARS AND VANS

Although Question 27 on the H form was headed 'Cars and garaging', it was not just concerned with cars. Instead the question sought information about one of the 3 taxation classes used in the Ministry of Transport's own vehicle census, those 'taxed wholly or in part as private vehicles'. This group included some vans as well as cars. The 2 taxation classes which the question sought to exclude were those taxed wholly as goods vehicles and those taxed as hackney carriages. The words 'in part' were included in the question so that the small groups of vehicles taxed as 'Private and Goods' and 'Private and Farmers Goods' would be counted as 'Private', and thus ensure comparability with the vehicle census, which at the time* of the 1966 Census treated them as 'Private'. Vehicles were to be counted if they were 'owned or used exclusively by you and members of your household'.

The results of the Quality Check are given in Table 3.13. The most important correction factor is that for the group of households without cars, and since this is almost entirely due to the fundamental error of treating 2 or more households as one household, it does not result from Question 27 as such. The main table shows that, where we agree with the census as to what constitutes the household, 2% of the 5,120 households were wrongly classified with respect to the number of cars or vans they had.

Rather more than one-third of these errors arose because of yet further difficulties with the definition of the household. Within this group of errors the number of cars wrongly omitted (19) almost balanced those wrongly included (21). The 21 cases of wrong inclusion of cars were mainly those of visitors. An instruction with the question told the formfiller to exclude the cars of visitors to the household. For persons described by the formfiller as visitors this worked fairly well; only 2 cars belonging to people described on the census form as 'visitors' were wrongly included. But formfillers did not look upon sons and daughters visiting them on census weekend as visitors, and did not describe them as visitors on the form, but as sons or daughters. The formfillers were not to know that GRO would treat them as non-household members, i.e. visitors, because their usual residence would be elsewhere; the term 'household' is never defined. So the cars of visiting sons or daughters were put down.

To counterbalance these 21 cases of wrong inclusion there were 19 cases where a car was wrongly omitted due to difficulty with the household concept. All 19 vehicles belonged to people other than the heads of households: in 11 cases to a son in 4 cases to boarders, in 2 cases to nephews, in one case to a wife, and in one case to a long term visitor who qualified as a member of the household. Two of the sons were students who were away in term time but were nevertheless members of their parents' households according to the census definition. Since their cars were away most of the time it is not surprising that they were omitted from the census forms. In another case the enumerator had asked the householder the question "Have you a car?", thereby missing the son's car.

Next in importance to these difficulties with the household concept were those due to the taxation class requirements. Here again wrong inclusions exceeded wrong omissions. There were 26 vehicles taxed as 'Goods' which

*These composite classes have since been abolished.

Table 3.13.

The accuracy of Question 27(a):
CARS and VANS

Measure of error:
 $\text{RMSE} = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n}} = 0.07\%$
 This reduces to 1.6%
 for the classification
 used in the published
 tables.]

		1986 CENSUS - PRIVATELY TAXED CARS AND VANS								
		Number of cars and/or vans								
		None	One	Two	Three	Four	Five	Six	Standard deviation from total estimate of cars and vans	
G E N U I N E C H E C K	None	2770	28	2					2805	
	One	26	1945	11	2				1984	
	Two		19	262	5				287	
	Three			5	30	1			36	
	Four				1	3	1		5	
	Five						2		2	
	Six						1		1	
Standard deviation from total estimate of cars and vans		2802	1992	280	38	4	4	5180	131	60
Census used & used results estimating more than one household		35	20	4	1				60	
Households wrongly recorded in the ten-per-cent		25	28	5	1				59	
GRAND TOTAL of household units according to census		2882	2040	289	40	4	4	5235	2774	2764

Explained and Unexplained

FROM THE 1986 CENSUS TABLES		QUALITY CHECK			Correction factor (A) - (a)
Classification used	Published figures (a)	Estimate (b)	%		
Households with:					
No car	8,349,990	8,576,000 ± 50,000	55.1	1.027	
1 car	6,029,320	6,014,000 ± 30,000	38.6	0.998	
2 cars	877,490	880,000 ± 20,000	5.7	1.003	
3 or more cars	103,780	100,000 ± 20,000	0.6	0.964	
Total de facto households	15,359,880	15,570,000	100.0		
Total work	8,115,630	8,100,000		0.998	

^a For method of estimation, see Appendix.

had been wrongly included, mainly small vans with C licences. Too much prominence may have been given in the question arrangement to vans and not enough to the taxation class requirement. 'How many cars, including vans' was in heavy type, but 'taxed . . .' was not. Consequently the phrase 'taxed wholly or in part as private vehicles' may have been overlooked. Probably for the same reason there were 10 cases of wrong exclusions arising from the taxation requirements. All these 10 were cases of composite taxation classes 'private and . . .'.

Taken together the difficulties with the household concept and the taxation class requirements account for almost three-quarters of the errors. The remaining errors are a rather mixed bag.

Blanks caused some trouble. There were 48 cases where part (a) of Question 27 had been left blank, which amounts to 0.9% of all households. GRO imputed the right answer in 41 cases, but was wrong in 7. In 6 of these GRO wrongly assumed that there was no car, but the seventh household was wrongly credited with a car. This last case involved a lorry, taxed as 'Goods', where part (a) of the question was blank but the garaging position of the lorry had been given in part (b).

Among the remaining wrong inclusions was one car that was not taxed, 2 cases where the car had been sold but not removed on census night, and a garage proprietor who regularly went home in whatever customer's car was available.

Among the remaining omissions were a few cases where the interviewer noted some embarrassment on the part of the formfiller because a car had been omitted, but where we do not know the reason; it may be that the car had not been taxed. One car was omitted because it had just been stolen.

Our study of the reasons for these errors suggests a few possible improvements for the future. More prominence might be given to the taxation part of the question. The rather clumsy 'wholly or in part' can of course be dropped, since the composite taxation classes have been abolished. An instruction, 'If you have a van, the licence on the windscreen will tell you if it is taxed

TABLE 3.14
Reconciliation of the Quality Check estimate
with the results of the road vehicle censuses

(England and Wales)

<i>Ministry of Transport vehicle censuses</i>		<i>Quality Check estimate for privately registered household cars and vans</i>	
Private licences* current at any time in September quarter 1965	8,248,000		8,100,000
Private licences* current at any time in September quarter 1966	8,792,579	Vehicles belonging to residents of institutions†	50,000
Mean of two quarters	8,520,290	Firms' fleet cars, hire cars, motorling school cars, etc.‡	250,000
Less an allowance for vehicles ceasing to be licensed during quarter	- 100,000		
		Estimates of all privately registered vehicles	8,420,290 → 8,400,000†

*Highway Statistics, Ministry of Transport, H.M.S.O.

†Private Motoring in England and Wales, P.O. Gray, 1969, H.M.S.O.

‡No allowance has been made for vehicles in the hands of dealers.

'privately', might help. The instruction 'Do not include cars or vans belonging to visitors' needs the addition of 'or people who do not usually live at this address'. In this way it might be possible to reduce the proportion of misclassified households to below 1%.

Even without any improvement the car statistics are of quite good quality; the estimate of the number of privately taxed household cars or vans is particularly good. The latter should therefore show good agreement with the counts obtained in the Ministry of Transport's own vehicle census, but as usual there are some difficulties in reconciling the 2 sets of figures. To the extent that this can be done, we have set out the figures above. In making the reconciliation we have built up from both sources an estimate of the total number of privately registered vehicles, both household and non-household, on census day.

The Ministry of Transport's vehicle censuses provide counts of the number of private licences current at any time during the September quarter. For comparison with the census we have taken the mean of the 2 counts for 1965 and 1966, and subtracted an estimate of the number of vehicles ceasing to be licensed during a quarter; this latter estimate was obtained by subtracting the increase in current licenses from the count of new licenses issued, a count which the Ministry also obtains.

Our Quality Check estimate excludes non-household vehicles. These fall into 3 groups. For 2 of these 3 missing groups we have been able to make crude estimates from another source*, but for privately registered, currently taxed, vehicles in the bands of dealers we are unable to make any estimate. In view of these difficulties the agreement is reasonably close.

(2) GARAGING

Part (b) of Question 27 dealt with the garaging of the household's cars or vans overnight. The question asked where the vehicle was normally kept overnight, but required answers only for 2 cars or vans in cases where the household had more than 2; in these situations the choice of which 2 was left to the formfiller. Those kept 'in garage or carport' were subdivided into those garaged 'within the grounds of your dwelling' and those garaged 'elsewhere'. Those not garaged were subdivided into those kept 'within the grounds of your dwelling', those 'on the road, street or verge', and those kept 'elsewhere'. Being dependent on part (a) of the question, part (b) will clearly be in error where a car or van had been wrongly omitted or wrongly included. Thus our table giving the results of the Quality Check has an extra row and an extra column to deal with this. The table has a further extra column to introduce the garaging of the third and subsequent cars, with which the census did not deal. So Table 3.15 is slightly more complicated than the general run of tables.

Of the 2,599 cars and vans where we agreed with the census about the household and the cars or vans, we disagreed about the garaging of the vehicle in 5.8% of cases. There was some trouble because people sometimes felt that what they normally did was wrong. Many people have a garage but normally park their car overnight in the drive or leave it on the road. There were cases where the formfiller had claimed the use of his garage on the census form

**Private Motoring in England and Wales*, P.G. Gray, 1969, H.M.S.O.

Table 3.15.

The accuracy of Question 27(b):
GARAGING

Misclassification
rate: 15% + 5.6%
25.6%

1966 CENSUS - GARAGING									
Where FIRST and SECOND households or cars normally kept at night									
		In garage		Not in garage		Sub-total of cars where drivers used a garage			
G	U	In garage	Not in garage	Within dwelling garage	Elsewhere	Within dwelling carriage	On road	Elsewhere	
Q	U	Within dwelling garage	Elsewhere	1243	14	13	4	1274	
A	S	Within dwelling garage	Elsewhere	7,395	3	3	3	412	
L	E	Within dwelling garage	On road	29	2	325	0	2,367	
I	G	Within dwelling garage	Elsewhere	9	7	7	451	3	477
T	K	Not in garage	Within dwelling garage	7	11	5	13	33	69
Sub-total of cars where drivers used a garage		Sub-total of cars where drivers used a garage		Sub-total of cars where drivers used a garage		Sub-total of cars where drivers used a garage		Sub-total of cars where drivers used a garage	
1256	430	363	480	41	2590	16	16	1325	
47	32	30	56	47	2784	1	1	429	
First or second cars wrongly included, but household said correct									
10	5	10	20			45			
Cars where drivers used a car really belonging to another household									
8	6	5	9	2		30			
Cars where households were wrongly included in first two-pair-unit									
28	2	6	3	1		40			
GRAND TOTAL of FIRST and SECOND households or cars according to census									
1341	443	374	512	44		2714			

FROM THE 1966 CENSUS TABLES			QUALITY CHECK		Correction factor $f(b) - f(a)$
Classification used		Population figure (a)	Estimate ¹ (b)	%	
Normally kept at night					
Not in garage	Within dwelling garage	4,037,560	3,974,000	49.0	0.984
	Elsewhere	1,373,650	1,327,000	16.4	0.956
All in garage	Within dwelling garage	1,081,810	1,176,000	14.5	1.087
	On road	1,314,990	1,335,000	16.5	1.015
	Elsewhere	180,960	292,000	3.6	1.614
	Not stated	126,660	-	-	
Total household cars and vans listed privately		8,115,630	8,104,000	100.0	

¹ For method of estimation, see Appendix.² Total group counts not only the third and subsequent cars but also some first and second cars where part (b) of Question 27 had been left blank.

but then confessed that one could not get a car in because of the junk or the children's toys, or simply that the garage was not big enough to take the car. The other side of the coin consisted of formfillers who had, probably truthfully, said on the form that the car was not normally kept in the garage overnight, who then claimed to use the garage when we checked the question. All in all we did not feel it was a very suitable question to ask on a census.

There was difficulty in interpreting 'within the grounds of your dwelling', particularly in the case of garages in the grounds of blocks of flats. We considered these garages to be within the grounds of the dwellings; so did many formfillers, but some did not.*

The question contained a good example of an attempt to improve accuracy which backfired—the use of the word 'carport'. This is a word which is not commonly understood, which bears a close resemblance to 'carpark', and whose meaning could very reasonably be guessed as car park. It was clearly taken as such in an appreciable number of cases. One formfiller wrote 'Yes' against 'In garage or carport within the grounds of your dwelling', but added a note 'RESEIDENTS (sic) CAR PARK'. Unfortunately GRO overlooked the note and accepted the 'Yes'.

3.10 Structurally separate dwellings

The census definition of a structurally separate dwelling is difficult to grasp and even more difficult to apply. If readers turn to the copy of the enumerators' booklet of instructions given in the Appendix they will find that as many as 7 out of the 52 pages are devoted to this difficult concept. As the booklet says, "the broad basis of the census standard is that for accommodation to count as a dwelling it must give the occupants roughly the same degree of privacy that is available in an ordinary unconverted house or in a flat in a purpose-built block; the accommodation must be structurally separate behind its own front door and the occupants must be able to get in and out without passing through anyone else's living quarters. So-called flats in large houses are not always dwellings from the census point of view." In practice the correct application of the definition requires a careful inspection of the access situation within any multi-occupied building if the principles embodied in the 3rd, 4th and 5th Examples are to be applied correctly. We shall leave it to the reader to study this section of the instructions.

Much less attention had been devoted to this definition in 1961 and, as we have already said, it had been very hardly applied. Many of the enumerators in 1961 had simply counted each household space in multi-occupied buildings as a structurally separate dwelling. As a result the reported number of dwellings in areas with a high proportion of multi-occupied buildings was often very inaccurate. Overall our study suggests that the 1961 Census overestimated the total number of structurally separate dwellings in England and Wales by about 2%.

The considerable effort put into instructing the enumerators in 1966 did produce an appreciable improvement in the treatment of dwellings. In fact the overall correction factor (1.002) for the total number of structurally separate dwellings in England and Wales does not differ significantly from

*Some improvement might result from 'within the grounds of the buildings you live in', which might perhaps cope with blocks of flats.

unity. But this figure conceals an appreciable, but compensating, misclassification of multi-occupied buildings, in terms of the number of dwellings they contain. We estimate that 12% of multi-occupied buildings other than purpose-built flats have been wrongly subdivided.

The problem is one of getting the enumerators to operate a definition which, to many of them, must appear unreasonable (consider the treatment of the 4th Example and the second part of the 5th Example in the enumerator's instructions), and which requires a careful inspection of the whole building.

PART IV SOME CHARACTERISTICS OF INDIVIDUALS

4.1 Economic position

The 2 economic position classifications used in the 1966 Census are derived from the answers given to 5 questions: numbers 10, 11, 18, 19 and 22. The questions, and the notes which appeared in the separate leaflet, are set out below and on the next page.

- | | |
|---|--|
| 10. Has the person had any job at any time during the twelve months ended 23rd April, 1966? (See Notes.) Write "Yes" or "No".
If "Yes" answer question 11. If "No" go on to question 19. | 10. |
| 11. Has the person had any job at any time during the week ended 23rd April, 1966? (See Notes.) Write "Yes" or "No".
If "Yes" answer questions 12 to 18. If "No" go on to question 19. | 11. |
| 18. Did the person have a job on Monday, 18th April, 1966? (See Notes.) Write "Yes" or "No".
If "Yes" go on to question 22. If "No" answer questions 19 to 21. | 18. |
| 19. On Monday, 18th April, 1966 was the person—
(a) Registered at a Ministry of Labour Employment Exchange or Youth Employment Office? Write "Yes" or "No".
(b) Seeking work but not registered at a Ministry of Labour Employment Exchange or Youth Employment Office? Write "Yes" or "No".
(c) Unable to seek work because of temporary sickness or injury? Write "Yes" or "No".
(d) Waiting to take up a job starting on 24th April or later? Write "Yes" or "No".
(e) Wholly retired? Write "Yes" or "No".
(f) Not seeking work for any other reason? Please specify. For example, write "Housewife", "Home duties", "Permanent sickness", "Disability", "Studying", "Private means". | 19.(a)
19.(b)
19.(c)
19.(d)
19.(e)
19.(f) |
| 22. Will the person be a student attending full-time at an educational establishment during the next term? (See Notes.) Write "Yes" or "No". | 22. |

Question 10—Employment

A job means any work for payment or profit including service in H.M. Forces. In particular it includes—

- (i) Work on a person's own account.
 - (ii) Part-time work, even if only for a few hours, such as jobbing, gardening or paid domestic work.
 - (iii) Casual or temporary work of any kind (for example seasonal work, week-end work and vacation work by students).
 - (iv) Unpaid work in a family business including a shop or farm.
- Unpaid work, other than in a family business, does not count as a job.

Question 11—With a Job last week

As well as people who attended work for pay or profit in the week before the census, the following people also count as having "had a job" during the week ended 23rd April, 1966.

- (i) People away from work on holiday if their job is waiting for them on their return.
- (ii) People away from work because of illness or injury if their job is waiting for them on their return.
- (iii) People away from work because of a strike or other industrial dispute.
- (iv) People temporarily laid off work by their employers for that week.

Question 18—With a Job on Monday 18th April

Answer 'Yes' to this question for anyone with a job on Monday but away from work for any reason. See Note to Question 11 also.

Answer 'No' to this question for anyone without a job on Monday 18th April even if they had a job at some other time during the week ended 23rd April.

Question 19—People without a Job on Monday 18th April

For anyone without a job on Monday 18th April write 'Yes' to at least one of the sections (a), (b), (c), (d) or (e), or give details at 19(f).

Question 22—Students

- (i) 'Student' means full-time student but it does not include a person on day release from work to attend school or college or a person with a job who also attends night school.
- (ii) 'Educational establishment' means a school, university, training college or any other establishment giving full-time education except one provided by employers for the training of their own workers (for example an apprenticeship school).
- (iii) 'Next term' means the summer term starting in April or May 1966.

GRO coded the answers into 26 groups shown in the diagram on the next page, and then used combinations of these 26 groups to produce the 2 economic position classifications shown below.

CLASSIFICATIONS USED IN THE PUBLISHED TABLES		GROUPS* INCLUDED
Main Classification		
<i>Economically inactive</i>		
(a) Students		1, 2, 3
(b) Retired		17, 25
(c) Others		18, 26
<i>Economically active</i>		
(a) In employment during week ending 23 April 1966		
(i) In employment on Monday 18 April		4
(ii) Not in employment on Monday 18 April		5-10
(b) Out of employment throughout week ending 23 April		
(i) In employment at some time during preceding year		11-16
(ii) Not in employment at any time during preceding year		19-24
Subsidiary Classification		
<i>Economically active but out of employment on Monday 18 April</i>		
(a) Registered at an employment exchange or youth employment office		
(i) Sick		9, 15, 23
(ii) Others		5, 7, 11, 13, 19, 21
(b) Not registered		
(i) Sick		10, 16, 24
(ii) Others		6, 8, 12, 14, 20, 22

*The numbers refer to the groups shown in the diagram on the next page.

Thus the economic position classifications depended on a complex coding operation performed on the answers to 5 questions which, as we shall later show, were often inconsistently answered. The 5 questions themselves were embedded amongst others, and they presented the formfiller with a formidable task, as can be judged if one reads the whole set of questions on the census form contained in the Appendix.

One of the purposes of the rather elaborate main classification was to enable the Ministry of Labour (DEP) to attempt a reconciliation of the census estimate of the economically active with their own estimate of the working population. The purpose of the subsidiary classification was to reconcile the census results with the Ministry's unemployment figures which relate to a Monday.

Table 4.1 examines the accuracy of the main economic position classification. It is based on the 3,380 adults aged 15 and over selected by taking every alternate adult in the B and C subsamples. There are no fringes to the central block of the table as there were with the household tables because we did not follow through the effects of wrongly including or excluding individuals†. The proportion of adults misclassified is 2.2%, the estimated

†In this part of the report, where we are dealing with the characteristics of individual persons, the incorrect treatment of 2 households as one has no effect, unlike the marked effect it had on the household characteristics.

The 26 Codes Defining Economic Position

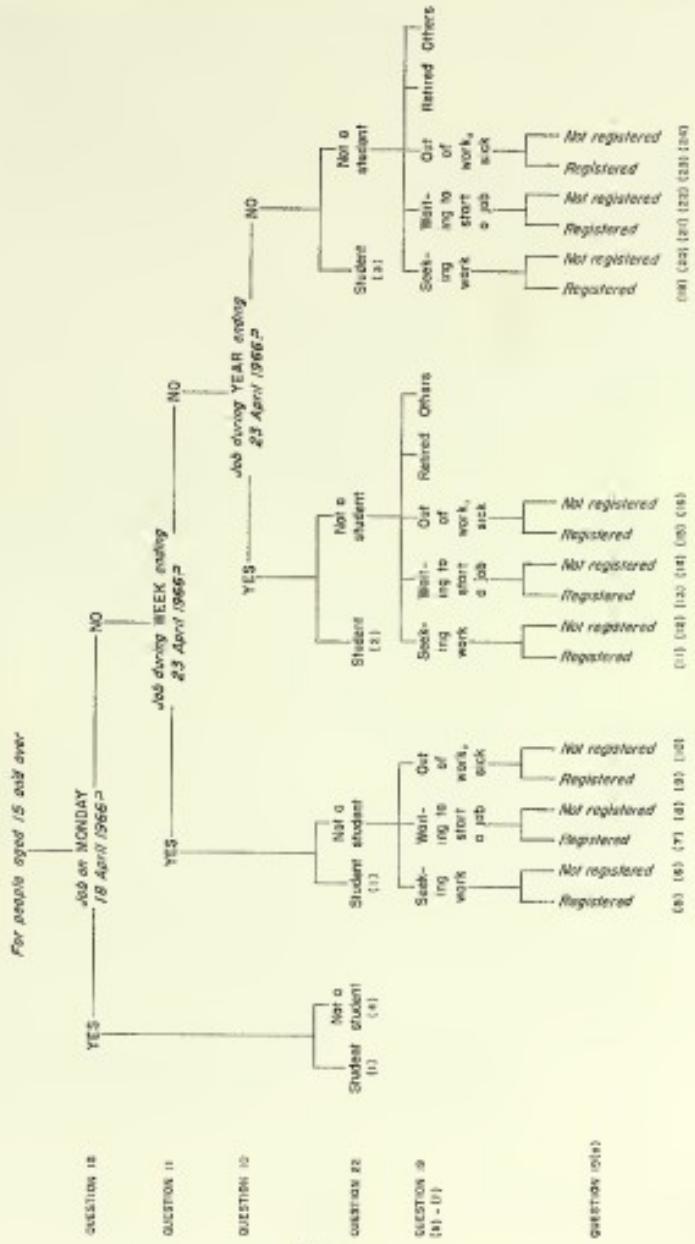


Table 4.1.

Accuracy of the MAIN ECONOMIC POSITION CLASSIFICATION

Nedderkloof
refid: Td
3360 = 2.2%

			1966 CENSUS - ECONOMIC POSITION							
			Economically inactive			Economically active				
			Student	Retired	Other inactive	In employment on Monday	In work part time or Monday but not on Friday	In employment during the year but not in the week	Not in employment during the year	Total adults according to quality check
G U L I T Y E N H A S	Economically inactive	Students	88		2					90
				183	3	1			1	188
					890	1		1	2	895
		Retired		4	41	2099	3	4	1	2152
	Economically active	In employment on Monday				2				2
		In employment during the week but not on Monday								
		In employment during the year but not in the week			1	1		27	1	30
		Not in employment during the year		1	2	1			19	23
Total adults according to census			88	183	939	2105	3	32	24	3380

Digitized and Males

FROM THE 1966 CENSUS TABLES		QUALITY CHECK			Difference Rate (%)
Classification used	Published Figures * (k)	Estimate [†] (k)	%		
Students	1,160,880	1,183,000	3.3	1.019	
Retired	2,197,060	2,180,000	6.0	0.992	
Others inactive	10,392,530	9,902,000	27.3	0.933	
Total economically inactive	15,750,470	15,265,000	36.8	0.965	
In employment on Monday	21,812,760	22,448,000	61.6	1.024	
In employment during the week but not on Monday	41,940	(21,000)	0.1	(0.501)	
In employment during the year but not in the week	375,050	347,000	0.9	0.925	
Not in employment during the year	214,480	214,000	0.6	0.998	
Total adults aged 15 and over	36,294,700	36,295,000	100.0		

* From Table 5 - Summary Tables.

† For method of estimation, see Appendix.

correction factor for the economically active is 1.022, and for the economically inactive 0.965. Further analysis shows that the correction factor for economically active married women is as high as 1.084.

As many as 53 out of the 74 errors shown on the table are cases where a person, in the majority of cases a married woman, should have been recorded as in employment on the Monday but was not. Failure to read and understand the meaning of the notes was the main trouble. In 23 cases the person was doing work covered by the first three notes to Question 10, including such things as domestic work, running mail order clubs from home, acting as representatives, making corsets or fireworks at home, etc. In 12 cases the person was working in a family business, mainly farms or shops, which according to note (iv) of Question 10 should have been counted. In 8 cases a temporary stoppage of work due to causes mentioned in the notes to Question 11 had been incorrectly treated. In 4 cases the enumerators had filled in the answers and made incorrect assumptions that housewives were not working. In one case a man described on the form as retired was in fact found to be running a farm, having 'retired' from what he considered to be his normal employment. In another case a person with a job during the year and during the week was shown as 'on sick leave' on the Monday and had been wrongly coded as not working on the Monday. There were 3 other cases of faulty editing and one where the 'family got the dates confused'.

Of the remaining 21 errors falling on the other rows of the table there were 7 further cases where the multiplicity of dates and time periods had caused confusion, 6 further cases of trouble with the definition of retired and disabled, and some further editing troubles.

One interesting feature of the table is that the diagonal cell for those correctly counted as 'in employment during the week but not on Monday' is completely blank. The 3 people assigned to this class by GRO were all wrongly assigned, and the 2 people correctly belonging to the class were wrongly assigned elsewhere. Since the whole point of Question 18 was to establish this class the question did not achieve its objective. Moreover it involved considerable processing effort which can be gauged from an account of GRO's editing of the answers to this question.

Originally there had been 22 people for whom the answers to the 3 Questions, 10, 11 and 18, on the census form read Yes, Yes, No, indicating that they had had jobs during the past year and in the last week but not on the Monday of that week. One of these was a student whose work position does not affect this classification since "student" had priority in the coding*. Of the 21 remaining, 19 were edited into the category of people with a job on Monday because they had left Question 19 blank (4 cases), answered all

*The preface to the Economic Activity Volumes states: "If on the data provided a person could be classified to more than one economic position, the highest possible was selected according to the following order of priorities:

Students aged 55 and over and 'retired' persons under the age of 35 were reclassified as 'others economically inactive'."

parts of Question 19 negatively (8 cases), or answered Question 19 in such a way that the validity of the answer to Question 18 was queried during the coding process (7 cases), for example a woman with a part-time job who was recorded as doing 'Home duties' on the Monday. Thus only 2 of the original 22 cases, a self-employed builder not actually working on Monday and a school cleaner not working during the holidays, were finally counted as having a job during the week but not on Monday. With the addition of the person already mentioned who had answered 'on sick leave' to Question 18, this makes 3 in all. But as we have said, all 3 were wrong.

On the other hand, one person of the 19 edited out of this group had in fact started a job on April 20th. A second person, who started a job on April 19th, had left Question 18 blank, but indicated that he had a job during the week. This was the one case out of 36 where GRO's assumption that such people had jobs on Monday was incorrect.

Thus the only 2 people in our sample who actually were in employment during the week but without a job on Monday were removed from this category during the coding process, while the 3 who were allowed to remain belong elsewhere. GRO were by chance able to reduce the size of this group to a number which is of the right dimensions, even if the resultant group does not contain the people who should properly be there. The unedited data would have produced an estimate about 10 times too large. The inclusion of this question must have had a cost in terms of the confusion caused to the form-filers, who would have been quite unable to guess its purpose.

GRO's editing troubles were by no means confined to Question 18. In all, 2% of adults had left blank one of the 3 key Questions, 10, 11 and 18. Apart from these, about $\frac{1}{2}\%$ of the adults had a logically impossible combination of answers to the 3 questions. Question 19 presented a host of problems. In the first place, $1\frac{1}{2}\%$ of those directed to 'go on to Question 19' from Question 10 and 11 failed to answer Question 19. On the other hand, 12% of those directed to 'go on to Question 22' i.e., to skip Question 19, did in fact answer Question 19. Categories (b), (c), (d) and (e) of Question 19 were intended to be mutually exclusive, but as many as 3% of those answering the question gave the answer 'Yes' to more than one of these categories or gave some other inconsistent answer. Another 16% who had already given an answer in (a)-(e) added something in (f) which had to be read to see if it was inconsistent. All in all we think GRO coped very well with an unenviable task.

We now go on to consider the subsidiary economic position classification which applies only to those people who, although not in employment on Monday, 18 April 1966, were nonetheless economically active. The answers to Question 19 are used to classify these people into 4 groups: first they are divided into those registered at a Ministry of Labour Employment Exchange and those not registered, and then these 2 groups are each further subdivided into those not seeking work because of temporary sickness or injury and those not seeking work for other reasons.

Table 4.2 shows that the census included 59 persons in this subsidiary classification whereas the Quality Check found there should be 55. Eight persons had been wrongly omitted, 12 had been wrongly included. The reasons for these errors have already been discussed. In addition 3 persons were wrongly classified in the central block of the table. These would appear to be cases where the formfiller did not consult the person concerned.

Table 4.2.

Accuracy of the SUBSIDIARY ECONOMIC POSITION CLASSIFICATION

		1966 GENSUS - SUBSIDIARY ECONOMIC POSITION				Quality Check add-on* of subsidiary economy active or not active Information	Quality Check add-on* of subsidiary economy active or not active Information	Quality Check add-on* of subsidiary economy active or not active Information		
		Economically active but not in employment on Monday, 18 April		Not registered						
QUALITY CHECK	Economically active but not in employment on Monday, 18 April	Registered	Sick	Other	Sick	Other				
		Registered	Sick	1				1		
		Registered	Other		22		2	24		
QUALITY CHECK	Economically active but not in employment on Monday, 18 April	Not registered	Sick			9		9		
		Not registered	Other		1		12	13		
Count sub-total of persons correctly classified to subsidiary classification			1	23	9	14	47			
Economically active but not in employment on Monday according to Quality Check				1	2	5	8			
Economically inactive according to Quality Check				3		1	4			
GROSS TOTAL of persons in subsidiary classification according to census			1	27	11	20	59			

* People not at employment on Monday, 18 April 1966, but nevertheless economically active.

Information collected during the Quality Check interviews casts some doubt on the value of the subdivision between 'sick' and 'other'. The category 'sick' is based on Question 19(c) which reads:

(c) Unable to seek work because of temporary sickness or injury?
 But 'temporary' is not defined. Twelve people in our sample had answered 'Yes' on the census form. Two of these were just off work sick but were really in employment on the Monday and were therefore definitely errors. The remaining 10 were asked in our interview, some 2 to 3 months after census day, whether they had started work yet. One person had, but the remaining 9 had not and were still not looking for work. Only one of these 9 indicated that he might consider getting a job if his health improved. This raises the question of how temporary is 'temporary sickness' intended to be. Thus quite apart from the definite errors we discovered there is reason to doubt the value of the subsidiary economic position classification.

We shall not attempt to reconcile either the major or subsidiary economic position statistics with DEP's figures as we do not think sufficient information is available to do so, nor could it be collected in this way.

4.2 Full and part-time workers

The 2 parts of census question 14 dealt with an individual's working hours and applied only to people with a job in the week prior to census day. The notes in the leaflet stress that part (a) applies to normal conditions whereas part (b) deals with the hours worked in the particular week.

14. (a) Was the job given in reply to question 13 full-time? (See Notes.) Write "Yes" or "No".	14(j)
(b) If "No" how many hours, excluding meal breaks, did the person work in that job in the week ended 23rd April? (See Notes.)	(b)

Question 14—Full-time/Part-time

- 14(a) Write "Yes" if employment is normally full-time but was interrupted during the week (for example by sickness, injury, holidays, short-time workings, strikes or unfavourable weather) or was started or stopped part way through the week.
14(b) For part-time workers not at work during that particular week write "None".

Thus no guidance was given as to what constituted a full-time job in part (a), and only those who decided that their jobs were part-time were then asked for the number of hours worked in part (b).

The lack of any objective definition of full and part-time in terms of the hours usually worked makes this classification of doubtful value, particularly as the question will not always have been answered by the person concerned but by the formfiller. Little could be done to check the answers to part (a) except to repeat the question, making sure it was answered by the person concerned. Part (b) could only be checked for gross errors since it referred to a particular week about 3 months prior to the Quality Check interview and any minor differences in the hours reported could be due to faulty memory.

Table 4.3 shows the result of our check* on the full/part-time classification, first for all workers and then separately for men and women. The misclassification rate was 1.7% for all workers, but higher for women (2.8%) than for men (1.0%). The largest proportionate error will be in the number of part-time male workers recorded in the census.

Much of this misclassification is due to processing error. GRO had introduced a 'Not stated' category for hours worked, because an appreciable number of answers took the form 'No' to part (a) (i.e. a part-timer) with part (b) wrongly left blank. Unfortunately this code was misapplied by the coders to other cases where both part (a) and part (b) were blank, with the result that 5 full-time workers were treated as part-timers with hours un-stated. The trouble arose because 2 different methods of dealing with non-response were used in the same coding frame. The coder had first to impute the answer for any blanks to part (a), and only if he decided that the answer should have been 'part-time' could the code 'Hours not stated' be used.

*The base number for our results is smaller than might be expected because, due to a design fault in the Quality Check, we did not follow through the effects of earlier errors.

Table 4.3.
Accuracy of Question 14:
FULL and PART TIME EMPLOYMENT

(a) ALL WORKERS

		1966 CENSUS- TYPE OF EMPLOYMENT		TOTAL WORKERS according to Quality Check
		Full time	Part time	
GEO- GRAPHIC CLASSIFICATION	Full time	1786	13	1799
	Part time	22	283	305
<i>Total workers according to census</i>		1808	295	2104

(b) MALES

		1966 CENSUS- TYPE OF EMPLOYMENT		TOTAL WORKERS according to Quality Check
		Full time	Part time	
GEO- GRAPHIC CLASSIFICATION	Full time	1313	10	1323
	Part time	4	21	25
<i>Total male workers according to census</i>		1317	31	1348

(c) FEMALES

		1966 CENSUS- TYPE OF EMPLOYMENT		TOTAL WORKERS according to Quality Check
		Full time	Part time	
GEO- GRAPHIC CLASSIFICATION	Full time	473	3	476
	Part time	18	262	280
<i>Total female workers according to census</i>		491	265	756

England and Wales

FROM THE 1966 CENSUS TABLES		QUALITY CHECK		Correlation coefficient (b) - (a)
GEOGRAPHIC area	Published figures in (a)	Estimate ¹ (b)		
MALES				
Full time	13,793,580	13,862,000		1.005
Part time	343,560	275,000		0.789
FEMALES				
Full time	5,248,810	5,085,000		0.989
Part time	2,540,040	2,704,000		1.065

* From Table 13 - Economic Activity Tables.

¹ For method of estimation, see Appendix.

Such a procedure is very liable to error where, as in this case, the answers to 2 questions are coded into one classification. Coding into a single classification in this way also helped to produce another processing error. One man had answered 'Yes' to part (a), indicating full-time work, and then instead of omitting part (b), which only applied to part-timers, had given his hours as 37. Of course he should have been coded as 'full-time' but the coder had looked at the 37 and wrongly classified him as 'part-time, working more than 36 hours a week'. Most of the other errors in the full/part-time classification would seem to be due to the formfiller answering wrongly for some other member of the household.

As has been said, we are only able to comment on the gross errors in the hours recorded in answer to part (b) of the question. Such an error seriously affected that group of 33 part-timers in our sample which the census recorded as working 1-8 hours in the week. In 7 cases, where the part-timer worked more than one day in the week, daily hours had been given instead of the weekly total.

ANOTHER DEFINITION OF 'FULL-TIME'

We decided when planning the Quality Check to collect some information to help in defining full-time in a more objective manner. After asking people whether they considered their job a full or part-time one we went on to ask them how many hours they worked excluding overtime. Table 4.4, is based on the 2,069 people where we agreed with the census as to the full/part-time classification and shows the usual hours worked, excluding overtime, as obtained in our interview.

TABLE 4.4

The number of hours usually worked by those recorded as full and part-time on the census

Number of hours usually worked excluding overtime (Quality Check interview)	Subjective assessment according to census				Total
	Full-time		Part-time		
	Number	Cumulative Total ↓	Number	Cumulative Total ↑	
Up to 24					
25	10	(10)	184	(283)	194
26	1	(11)	23	(99)	24
27	1	(12)	8	(76)	9
28	3	(15)	7	(68)	10
29	5	(20)	6	(61)	11
30	1	(21)	6	(55)	7
	12	(33)	18	(49)	30
31	2	(35)	4	(31)	6
32	1	(36)	3	(27)	4
33	5	(41)	3	(24)	8
34	5	(46)	4	(21)	9
35	55	(101)	4	(17)	59
36	28	(129)	6	(13)	34
More than 36	1,657	(1,786)	7	(7)	1,664
Total workers	1,786		283		2,069

The data are so arranged that it is possible to see the effect of defining full-time in terms of more than a certain number of hours per week. Two

possibilities suggest themselves. One might set out to minimize the number of people who would be classified differently according to their own subjective view. In this case full-time would be 'over 32 hours a week' and 60 people (3%) would be classified differently. Alternatively, if one seeks a classification which would yield the same number of full-timers as given by Question 14, then full-time would be 'over 30 hours per week' and 64 people, slightly more, would be classified differently. The latter definition has the advantage of involving a round number, and it is interesting that this definition of 'over 30 hours per week' has been used for many years by Social Survey.

4.3 Second occupation

Question 17 dealing with a person's second occupation was a new topic not previously dealt with on a census.

17. (a) Did the person do any other work for payment or profit during the week ended 23rd April, 1966 in addition to the work described in reply to questions 12 and 13? (See Notes.) Write "Yes" or "No".	17(a)
(b) If "Yes" was any of this additional work as an employee? Write "Yes" or "No".	(b)

Questions 12 and 13, and the appropriate notes, can be found in the Appendix. The note for this question, like the notes for other questions, was provided for the formfiller in the separate leaflet, and read as follows:

Question 17—Other Jobs

17(a) Write 'Yes' for people who had any other job or jobs in addition to that described in questions 12 and 13. Any additional part-time or casual work counts as another job whether it was on the person's own account or as an employee.

While the question itself asks about 'any other work' done during the week, the notes in the leaflet refer to 'any other job'. We have assumed that the question was trying to establish whether a person had a second occupation in the week, rather than whether or not he actually did any work during that week; we have thus treated second occupations in the same way as main occupations. With a small proportion of main occupations there had been a problem in deciding whether a person had a job during the week in question because no actual work was done during that week. After discussions with DEP we adopted the principle that provided any contract, no matter how informal, existed, then the person had a job at that time. So we applied the same principle to second jobs where, due to the part-time nature of the work, such cases are relatively much more common.

Two further problems of definition bedevil this question. The first arises where a person engages in several activities, and a decision has to be made whether these activities constitute one or several jobs. The second difficulty concerns the dividing line between work as an employee, and being self-employed or working on one's own account. Since comparability with DEP's statistics was the aim, we tried to classify the occupation according to the type of National Insurance contributions which would probably have been

paid if this had been the main occupation; we were of course dealing with a hypothetical situation since no one has to pay contributions in respect of an additional job provided their card has already been stamped by their main employer. So our decisions were sometimes rather arbitrary.

We treated all odd-jobbing that was done on a fee-paid basis as work 'done on a person's own account'. Work paid for on a commission basis was similarly treated unless a fee was paid as well. In some cases we fell back on the informant's own view of his status.

Not surprisingly the formfillers had considerable trouble with Question 17, as the results of the Quality Check show in Table 4.5. The correction factor for those with a second occupation as an employee is 1.902, which is somewhat larger than that for the self-employed, 1.576, but both are excessively large.

There were 59 people for whom we decided a second occupation had been omitted. In about a third of these cases the person had done some work during the week which certainly should count as a second occupation. In another third of these cases the occupation was definite enough but the person had done no actual work in it during the week although there was some kind of contract covering the period. Whether the remaining third of cases should be counted is a little more debatable, but for even the most debatable cases classed as omissions comparable cases were to be found among the people who did claim a second occupation.

The people who were wrongly attributed second occupations are an interesting group. Half of these had merely done some overtime during the week in connection with their main, and only, occupation. Probably the preceding questions helped to produce these errors. By asking whether the main occupation was full-time, Question 14(a) may have suggested that Questions 12 and 13 referred to normal working hours and that overtime was 'additional work'.

The other half of these wrongly attributed second occupations were people recorded as having additional work but not as an employee. On forms where this erroneous pattern of answers occurred we found that all the working members of the household had been treated in the same way by the formfiller with a 'Yes' to part (a) and a 'No' to part (b). When interviewed and asked for details of their additional work, one and all disclaimed all knowledge of doing any, with remarks such as 'I just wouldn't have the time', 'Father got it wrong', and 'I just made a mistake'. After much head scratching we hit on what is almost certainly the explanation; it is to be found in the specimen of a completed form* that was issued with the H form to every formfiller. The first person on that form, James Cox, appears to be an ordinary man with a fairly ordinary job as a 'maintenance electrician', but in one respect he is unusual: he has answered 'Yes' to Question 17(a) and 'No' to part (b). This means that, besides being employed in his main job as an electrician, Mr. Cox also worked on his own account at some second job but, because the form does not ask, one has no idea what this second job is. We think that these formfillers, puzzled by Question 17, turned to the example and decided that Mr. Cox had the right pattern of answers for them to copy.

*Given in the Appendix.

Table 4.5.

Accuracy of Question 17:
SECOND OCCUPATION

		1966 CENSUS - SECOND OCCUPATION			Quality Check (ratio of persons with a main occupation)
		Not employed	As employee	As self-employed	
Q U A L I T Y	Name	1986	7	7	2000
	As employee	37	23	2	62
	As self-employed	22	1	19	42
	Total persons with a main occupation	2045	31	28	2104

Detail and Notes			
FROM THE 1966 CENSUS TABLES		QUALITY CHECK	Classification factor (b) = (a)
Circumstances used	Published figures (a)	Estimate ¹ (b)	
No second occupation	21,309,540	20,841,000	0.978
Second occupation as employee	348,000	663,000	1.902
Second occupation as self-employed	267,850	422,000	1.576
Total persons with a main occupation	21,925,390		

¹ For method of estimation, see Appendix.

The answers to Question 17 have not been used in any of the published tables, but one of the census volumes* states that certain tables are available giving economic activity analysed by age and whether or not a person had a second occupation as an employee or as a self-employed person in the week before the census. We would not recommend the use of these tables. The topic covered by this question is, we think, quite unsuitable for inclusion in the census. If accurate and useful information is to be obtained, then not only is an interview required, but a whole series of questions must be asked in order to deal with the difficulties of definition.

4.4 Transport to work

Like the car ownership question which we examined in Part III, Question 16, dealing with transport to work, was introduced into the census for the first time in 1966. Because Question 16 deals with a person's journey to his place of work, it will be necessary to look at some of the difficulties arising from Question 15 as well, since that question asked for the address of the place of work. The notes referred to were given in the separate leaflet, part of which is reproduced.

15. What was the full address of the place of work for the job given in reply to question 13? (For transport workers, building workers, dock workers, seamen and people with no regular place of work, see Notes.) If the work is carried on mainly at home write "At home".

15.

Question 15—Place of Work

- (i) For people with no regular place of work such as sales representatives, transport inspectors, certain building workers and others who do not work daily at or from a fixed address or depot, write 'No fixed place'.
- (ii) For people working daily at or from a fixed address or depot, such as certain transport workers, and building workers employed on a site for a long period, give the address of the depot, site or other fixed address.
- (iii) For dock workers registered under the National Dock Labour Scheme who are in possession of a Pay Voucher Book issued by the National Dock Labour Board, give the address of the call stand or control point where they are required to prove attendance. For registered dock workers not issued with a Pay Voucher Book by the Board and other dock workers, give the name and address of the dock or wharf at which they are usually employed.
- (iv) For seamen give the name of the ship and, if it is in the United Kingdom, the port in which it is lying, otherwise give the name of the home port.

The question that concerns us in this section followed the workplace question. There were fairly lengthy notes in the leaflet but they proved both ineffectual and inadequate.

*Economic Activity Tables, Part I, page xxi.

16. What method of transport does the person normally use for the longest part, by distance, of the journey to the place of work given in reply to question 15? (See Notes.)
If the person walks all or most of the way to work write "On foot".

16.

Question 16—Transport to Work

- (i) For people using more than one method of transport to work give only the method by which the longest distance is travelled (for example if the normal journey to work is one mile by bus and five miles by train, write "Train").
- (ii) For people whose main method of transport to work is by bus, write either "Public service bus" or "Private bus" whichever is appropriate.
- (iii) For people whose main method of transport to work is by motor cycle combination write "Motor cycle combination" and not "Motor cycle".
- (iv) For people who work at home write "None".
- (v) For people with no fixed place of work give the method of transport most often used for going to work.

Many formfillers did not grasp the distinction, made in Note (ii), between "Public service bus" and "Private bus", with the result that GRO had to abandon the distinction, and the published tables have only one group, "bus". As many as 40% of the answers involving "bus" contained no further qualification, and in some cases where it was qualified the word "Public" was in the enumerator's handwriting.

It is surprising that the notes did not ask for a distinction between London Transport* and other trains since "train" and "tube" are given separately in the published tables. While Note (iii) asks for motor cycle combinations to be distinguished, which affect only about 2 per 1,000 workers, the notes do not define the much larger class of "Goods vehicles" which are given separately in the tables. This latter group would be better described as lorries and vans, since it is based on the description of the vehicle given and is not a taxation class.[†]

Because of this it will come as no surprise that Table 4.6 shows a misclassification rate as high as nearly 7% and some of the census figures need drastic corrections, notably those for "train", "tube" and "none".

Approximately one third of all the errors are associated with the definition of place of work. A major contribution to this group was from people who worked at home and answered "on foot" instead of "none". GRO attempted some editing to ensure that the answers to Question 16 were consistent with those given for workplace in Question 15, but this was not always successful, particularly where a workplace was given which could only be identified as the person's home address by comparing it with the home address given on the other side of the census form.

*We assume that this is what "tube" stands for.

[†]Note that Question 27 deals with cars and vans taxed "Private" or "Private and Goods". Such vans will be included in "Goods vehicles" in this question.

Table 4.6. Accuracy of Question 16:
METHOD of TRANSPORT TO WORK

1966 CENSUS - TRANSPORT TO WORK											Net workers account by method check
	Train	Tube	Bus	Car	Goods vehicle	Motor vehicle	Pedal cycle	On foot	Other	Name	
Q U A L I T Y E H E C K	Train	88		4							92
	Tube	18	26	3							47
	Bus	1	4	541	1			6		2	555
	Car		1	13	547	2		2		1	566
	Goods vehicle			2	7	59	1			1	70
	Motor cycle (solo)			2	1	1	57	2			63
	Pedal cycle			1	1		2	167	3		174
	On foot		15	3	4		1	376		3	406
	Other										
	Name				7	1	1	3	20	98	133
	Total workers according to census	107	31	579	567	67	61	175	409	102	82104

^a This total includes 4 motor cycle combinations.

^b Based on a description of the vehicle, not its taxation class.

FROM THE 1966 CENSUS TABLES		QUALITY CHECK		Correlation factor (b) = (a)
Categorisation code	Published figures ^a (a)	Estimates ^b (b)	%	
Train	1,146,660	987,000	4-6	0.861
Tube	288,030	467,000	2-2	1.621
Bus	6,309,660	6,050,000	28-3	0.959
Car	5,507,180	5,523,000	25-9	1.003
Goods vehicle ^b	675,670	704,000	3-3	1.042
Motor cycle (solo)	612,650	633,000	3-0	1.035
Pedal cycle	1,098,640	1,614,000	7-6	1.010
On foot	4,114,050	4,068,000	19-1	0.994
Other	9,450	9,000 ^c	-	-
Name	957,280	1,292,000	6-0	1.349
Net stated	147,500	-	-	
Total workers	21,367,060	21,367,000	100-0	

^a From Table 9 - Workless and Transport Tables.

^b Per method of estimation, see Appendix.

^c Assumed to be 9,000.

Another contribution to the group of errors came from self-employed people, such as plumbers or window-cleaners who were based at home but, instead of writing 'none', had wrongly recorded the transport they used to travel from job to job. There were also those who travelled daily to a yard or depot by one form of transport, which they should have recorded, and then travelled on from there by another form of transport, which they wrongly recorded. A fair proportion of these errors could have been removed by careful hand editing.

GRO had trouble with some descriptions of the method of transport that were entirely inadequate. There were some 50 answers giving 'public transport' or 'public service vehicle', which GRO had to treat as bus, although they sometimes meant train. Such answers were encouraged by the use of the word 'transport' in the question and by the note about public service buses. Similar problems arose with answers such as 'firm's transport' or 'motor vehicle' which sometimes meant a lorry or a van, whereas GRO assumed it meant a car.

Rather more than a tenth of the errors occurred because the answer referred to a return journey from work, where a different method of transport was used for the outward journey. Another fifth of the errors occurred because the formfiller made a wrong assumption about how another member of the household travelled to work. There were, for example, cases where the husband had put on the census form that his wife used a bus to go to work when in fact she walked, and vice versa. No doubt some formfillers answered Question 16 in terms of how they themselves would make the journey, without asking their wives, sons, daughters or boarders what actually happened.

Finally there is the group of errors which seriously affect 'train' and 'tube' figures. Rather more than one-tenth of all the errors were due to people writing 'train' when they travel by a London Transport train, although they cannot be blamed for this. We give below separate correction factors which show the effect on the figures for London.

	Greater London Conurbation
Train	0.74
Tube	1.40

We would also point out that the form of this question led to many uses of transport not being recorded especially in areas such as London where a number of different modes are frequently employed. Our interview data suggests that the 'tube' users would be increased by nearly 50% if all the methods used in the journey to work were included.

4.5 Qualified manpower

Question 23 was the last question in the section of the census form that collected information about individuals. The first part of the question established whether a person had any higher education qualifications and the second part asked for details of the qualifications.

Thus the census question itself gives little indication of the lowest level of acceptable qualifications. Obviously degrees and degree level qualifications are acceptable, but the term 'vocational qualification' could mean anything

from a 'Certificate in Hairdressing' to 'Membership of the Royal College of Surgeons'. For further guidance the formfiller was expected to look at the notes in the separate leaflet.

For people aged 18 and over	23(a)
<p>23. (a) Has the person obtained any degrees, diplomas, associateships or other professional or vocational qualifications after attaining the age of 18? (See Notes.) Write "Yes" or "No" at [].</p> <p>(b) If "Yes" state at [] all such qualifications obtained, followed by the major subject or group of subjects in which each was obtained. (See Notes.)</p>	
(b)	

Question 23—Higher Education Qualifications

- (i) Exclude all qualifications normally obtained at school such as

General Certificate of Education (G.C.E.)—all levels.
School Certificate and Higher School Certificate
Matriculation
Scottish Certificate of Education (S.C.E.)
Scottish Leaving Certificate (S.L.C.)
Higher Leaving Certificate (H.L.C.)

and any other qualifications equivalent to or lower than any of these such as

Ordinary National Certificate (O.N.C.)
Ordinary National Diploma (O.N.D.)

- (ii) Enter at [] all appropriate qualifications in the order in which they were obtained together with the major subject or group of subjects. Use recognized abbreviations where appropriate, for example—

H.N.C. (Building)	Ph.D. (History)
S.R.N. (Nursing)	M.A. (General)
B.A. (French and German)	Dip. Tech. (Chemical Engineering)
B.Sc. (Zoology)	A.M.I.C.E. (Civil Engineering)

otherwise write the name of the qualification in full as, for example—

Teaching Certificate (Physical Education)
Law Society's Qualifying Examination (Part I)

However, the notes do not cover many qualifications, particularly vocational ones; and in some cases the formfiller must have had considerable difficulty in deciding whether a particular qualification counted as being vocational.

In addition to the notes the formfiller had the example (reduced to a quarter of the original size) of a completed census form, on which specimen answers were given. One might expect a large number of formfillers to look at it,

especially if they were uncertain about the eligibility of a particular qualification. Two of the people in the fictitious household on this example of a completed form had qualifications—the wife, who was not working, had an SRN (Nursing) and the visitor, who was a retired civil engineer, was an AMICE (Civil Engineering). Thus SRN (Nursing) appeared both in this example and in the notes. Nevertheless we shall find that there was a widespread failure to record nursing qualifications.

To avoid holding up the rest of the programme GRO decided to postpone the main coding of this difficult question until all the other census questions were coded and on the computer tape. Initially they merely punched the Yes/No answers to part (a) of the question. So while the analysis of the other questions was proceeding a computer print-out was produced giving the serial numbers of all the forms containing persons with qualifications. When these forms had been picked out the detailed coding of Question 23 started.

During this second stage of the coding operation 2 indexes were compiled, one of acceptable and the other of unacceptable qualifications. The census form for each person with a 'Yes' punched for part (a) was examined and, if the qualification did not already appear in one of the 2 indexes, its details were sent to the Department of Education and Science (DES) so that they could decide to which list it should be added, acceptable or unacceptable. Thus the dividing line between acceptable and unacceptable qualifications was settled during the coding process by building up a volume of acceptable qualifications, containing about 4,000 entries, and a volume of unacceptable qualifications, containing about 5,000 entries. Looking through the volumes one has some difficulty in deciding just what criteria of acceptability have been used for the lower level qualifications. Apart from this we discovered a few anomalies. For example, SEPN is listed in the volume of unacceptable qualifications, whereas 'State Enrolled Psychiatric Nurse' appears in the other volume as an acceptable qualification, although the 4 letters stand for just this. Similarly, 'Associate Member of the Institute of Industrial Administration' appears in both volumes. Doubtless there are others.

Whenever a qualification was added to the index of acceptable qualifications it was assigned a 6 digit code, the first 3 indicating the type and level of the qualification, the other 3 the subject in which it had been obtained. Three different levels were identified:—

Level A — Higher degree or equivalent

Level B — First degree or equivalent

Level C — Other acceptable qualifications of a lower level, gained after the age of 18.

In order to classify a person by the highest educational level attained, GRO defined the 'highest academic qualification' as the last,* and hence the most recently obtained, qualification listed on the form in the highest level attained.

A difficult coding problem arose because the question had not asked for the name of the body or institution which granted the qualification. It is however obvious from the indexes that the coder often needed to know who awarded

*Note (ii) asked for a person's qualifications to be listed 'in the (chronological) order in which they were obtained'.

the qualification before deciding which code applied. Fortunately many people gave the name of the awarding institution although they had not been asked to do so, but in other cases its absence or an inadequate description made difficult the decision as to whether or not a qualification was acceptable and, if acceptable, its academic level.

The most serious problem arose with the MA qualification, since in Cambridge, Oxford, and most Scottish Universities this is a first degree whereas elsewhere it is a higher degree. As there are about as many people with a first degree MA as there are genuine holders of post-graduate qualifications of all types, there is considerable room for over-estimating the number of higher degrees. If every first degree MA qualification were wrongly treated as a post-graduate one, then the estimated number of people with post-graduate qualifications would be inflated to about twice the correct size.

We were able to give warning of this danger before the coding was completed and special revised coding instructions were given on the treatment of MA degrees. Basically the principle used was to assume that, lacking any further information, an MA entered after a first degree was a higher degree, whereas an MA entered without a previous degree was itself a first degree. Fortunately about half the people with an MA named the University on the form. Special instructions were also given on the eligibility of foreign qualifications, although, once again, the awarding body was not always given.

Another coding problem arose because some people only gave their highest qualification in a particular subject. For example some people only gave their Ph.D degree but had omitted their first degree. Such omissions were dealt with by assuming that the person held a first degree level qualification in the same subject as his post-graduate qualification.

All in all, Question 23 presented the GRO with an expensive, difficult, and time consuming coding operation.

Because the processing of this question was handled separately from the rest of the census schedule by GRO we did not obtain the final census classification for our sample. So our Quality Check results cover the errors made by GRO in coding the first part of the question but not any made in coding the second part. Our results do of course cover the formfiller and enumerator mistakes which could not be rectified by GRO.

At the stage when we were planning our interview questionnaire the lower limit of acceptable qualifications had not been settled so the only safe thing to do was to cast the net wider and collect information down to a much lower level.

Each person was taken through a history of the examinations which had resulted in qualifications. If full-time education had finished before the age of 18, particular attention was given to any examinations they might have passed at work, on day-release, through evening classes, correspondence courses or by private study. Other qualifications which might have been obtained without examination were dealt with separately, and informants were given an opportunity to talk about any qualifications which they thought might have been included on the census form but were not. For each qualification we asked the age at which it was obtained and the main subject. One piece of information we should have asked for, but, like the Census did not, was the name of the body granting the qualification. Fortunately we were often given it, but in other cases, where we later found we needed it, we wrote to the people concerned and got a reply from everyone.

Our decision to cast the net wider had quite dramatic effects on the number of unacceptable qualifications with which we had to deal. Whereas GRO had had to examine the qualifications held by 8% of adults aged 18 and over, and ended by rejecting 2% whose qualifications were unacceptable, Social Survey had to examine the qualifications held by 23% and ended by rejecting about 17%. A heavy price was paid for the additional accuracy obtained.

Table 4.7 compares our coding of the position which GRO found at the second coding stage with the Quality Check version and is based on the 3,190 adults aged 18 and over in our sample. We see that GRO would treat 183 people as qualified compared with the 200 found by the Quality Check. Three people would be wrongly coded as qualified because insufficient details had been given to disqualify them. The other unacceptable qualification that would be counted belonged to someone who would be coded as having 2. Twenty people would be wrongly treated as unqualified, 3 of these because they were missed at the first coding stage by GRO. Fifteen people, although giving some qualifications, had given one less than they had, but in 3 cases GRO could put this right by applying their editing rules and supplying the missing lower level qualifications. Since we do not know the extent of the error GRO made in the second stage of the coding we shall assume they did it perfectly.

Thus the census estimate of highly qualified manpower needs to be increased by about 9% and the number of qualifications by about 12%. These correction factors will be underestimates if GRO made any errors during the second stage of their coding.

This underenumeration of qualified manpower is widespread and not by any means confined to particular qualifications. For example, there will be a 25% under-estimation of people with nursing qualifications according to the information obtained about the 45 qualified nurses in our sample. Similarly 9% of the 57 people with acceptable teaching qualifications failed to give them on the census form. On the other hand 2 apparently qualified teachers proved to have only unacceptable qualifications. Nurses and teachers have been singled out for comment because they are sizeable groups for which examples were given in the notes. It does rather suggest that even in households with highly qualified members the notes are not always read.

In nearly half the cases where the formfiller had omitted a person's only qualification it had not been thought of as a sufficiently high level to count. For example, a State Enrolled Assistant Nurse explained that the qualification had not been given on the form because 'the examinations were not as difficult as for the SRN'. Several nurses had no qualifications according to Question 23 although SRN was recorded elsewhere on the form as part of their occupation statements. Another person had not included his HNC because he was 'not sure whether it was necessary to have letters after your name before counting them as qualifications'.

Another sizeable group of omissions occurred because people were no longer using a qualification. This was particularly true of housewives and retired people but it could also occur when a person had been trained for one occupation and was working in a job where those qualifications were not required. For example, we interviewed a wool merchant who was a qualified electrical engineer but had not given his qualification for this reason. Since one of the aims of including this question in the census was to measure the

Table 4.7. Accuracy of Question 23:
QUALIFIED MANPOWER

			1966 CENSUS - QUALIFIED MANPOWER					Total adults aged 16 and over	
			Number of acceptable qualifications						
Q U A L I F T Y C H E C K	Number of acceptable qualifications	None	One	Two	Three	Four			
		2987	3				2890		
		18	113	1			132		
			10	39			50		
			1	2	11		14		
						4	4		
Total adults aged 16 and over		3007	126	42	11	4	3190		

England and Wales			
Classification used	Applicable figures (a)	QUALITY CHECK	
		Estimate (b)	Correction factor (b) - (a)
Adults with qualifications	2,148,380	2,360,000	1.094

¹For method of estimation, see Appendix.

potential size of the qualified labour force, including those people who are not using their qualifications, these omissions constitute a serious deficiency in the data.

Apart from these 2 main reasons for omissions a number of other omissions occurred because the formfiller did not ask members of his household about their qualifications. Several teaching diplomas were not recorded for people with degree level qualifications.

As might be expected from the omissions we have described, the 3 levels of qualification were deficient to differing extents. The correction factors are as follows:—

	Correction factor	Base
Level A (Post-graduate)	1.00	(31)
Level B (First degree)	1.05	(93)
Level C (Lower)	1.19	(135)

With Level A the omissions were counterbalanced by the wrong inclusions arising from the absence of the awarding institution. Although the number of people in our sample with an MA at Question 23 was small (12) we made a very careful check to see if they were Level A higher degrees. We were able to establish that the GRO coding and editing procedure could successfully deal with all but 2 MA qualifications. One was an Oxford MA which would be misclassified as Level A because a BA was also shown. The other MA would be miscoded as Level A, because GRO would be unaware that it was an American qualification which DES would not recognise as a higher degree. In addition one man, who claimed to have a Ph.D on the census form, admitted to our interviewer that it was 'an unrecognised one from an obscure American place'.

GRO adopted the rule that the 'highest academic qualification' was defined as the most recently acquired in the highest level attained. Of the 183 people who would have acceptable qualifications according to the GRO the highest academic qualification would be wrong in 10 cases, 3 because their only qualification was really unacceptable, the 3 level A cases we have just discussed, and a further 4 because multiple qualifications have been entered on the census form in the wrong chronological order. Two nurses gave the wrong nursing qualifications first, one man would be classified to dentistry rather than medicine, and another man to engineering rather than management. In addition to these mistakes one must remember the 20 people whose qualifications were missing completely.

PART V SPECIAL INVESTIGATIONS

5.1 Why there was no Preliminary Report*

In earlier censuses a Preliminary Report was produced soon after census day, giving preliminary counts for all administrative districts. To get these counts quickly, special measures were adopted. After the census forms had been collected, the enumerators were required to enter in their enumeration record books, against the address of each household and institution, the number of persons present on census night.[†] The entries were then added by the enumerators to produce page totals and a book total. From the book total, the census officers produced administrative district summaries which were forwarded to GRO. Finally GRO used these summaries to produce the figures for the Preliminary Report. With full censuses this was fairly simple.

The intention was to produce a Preliminary Report in 1966 in a similar way, but there were difficulties. There would have been no difficulty if the enumeration had been a straightforward 10% sample of the population; all the counts could simply have been multiplied by 10. But, as we have seen, some sections of the sample were sampled at a higher rate than 1 in 10 and consequently needed down-weighting relative to the main part of the sample. This down-weighting proved the downfall of the Preliminary Report.

In the first place there was the oversampling which had occurred in buildings, other than purpose built blocks of flats, where the sample address issued to the enumerator was only part of the building. These addresses had been chosen with a 1 in 10 chance of selection; but the enumerator was instructed that, when he reached the building, he should enumerate all the households in the whole building. Thus the households in these buildings had been given more than a 1 in 10 chance of filling in a census form. To help deal with the problem this created, the enumerator was required to put an arrow against the household, or households, occupying that part of the building which corresponded to the original sample address that he had been given. Then by counting only the occupants of the arrowed households the effect of the oversampling could be almost eliminated. GRO expected that the arrows would sometimes be wrongly placed or missing for some buildings, and they were concerned about the effect of this. They asked us to advise them as rapidly as possible whether the preliminary figures would be sufficiently accurate to be worth presenting. We were able to do this as soon as we had obtained the photocopies of our sample of enumeration record books. We quickly found that, although some trouble had arisen from missing and misplaced arrows, far greater errors had arisen in connection with the second section of the census sample which was oversampled, the large institutions.

*This section formed the basis of an article in *Statistical News No. 10*, published by the Central Statistical Office.

[†]See paragraph 65 in the enumerators' instructions.

It will be remembered that large institutions had received a complete enumeration, and were then treated in 2 different ways. Where the large institution was a hotel, census data in the shape of individual P forms had been obtained for everyone staying there on census night. As a check the manager had to certify on a C form the total number staying at his hotel. (Later GRO headquarters took a sample of 1 in 10 of these hotel P forms.) The procedure in other large institutions was different to that in hotels. In other large institutions, such as hospitals, the manager was required to list all the occupants on L forms (F forms in Forces' establishments), but only those falling on every tenth line on the form were required to complete a P form. Thus only 10% of persons in hospitals ever completed P forms. However, as part of the preliminary count procedure, the enumerator had to enter 100% of the institutional population in the person's column of his enumeration record book. We were not surprised to find some cases where, instead of entering the number of persons listed on an L form, the enumerator had entered the number of P forms completed, i.e. about one-tenth of the figure required. This introduced an appreciable error into the population estimates, but it was still not the major source of error. We found that the major contribution to the error arose from the completion of the 2 summary tables at the back of the enumeration record book, i.e. the Abstract of Record and Institution Abstract.* Here the enumerator summarized the counts he had made for each page of his book. In the Abstract of Record table the enumerator entered the page totals for the persons present at the sample addresses and thus arrived at a grand total for the book. This table should have included 100% of the population in large institutions and 10% of the population not in large institutions. In the other table, the Institution Abstract, the enumerator should have entered 100% of the population in large institutions. The important point is that 100% of the population in all large institutions should have figured in both abstracts. Then, after further summarizing by the census officers, GRO could have derived the estimated population for any administrative district by computing $10(a - x) + x$, where a is the total in the Abstract of Record (i.e. 10% of the population not in large institutions + 100% of the population in large institutions), and x is the total in the Institution Abstract. But no one told the enumerators and the census officers that the figures would be used in this way. So they tried to be helpful and, as they thought, avoid double counting. Some enumerators left out the large institutions from the Abstract of Record with disastrous effects. Worse still, some census officers amended Abstracts that had been correctly filled in. Every time a large institution was included in the Institution Abstract but omitted from the Abstract of Record, it meant that the estimated population of England and Wales was wrongly reduced by 10 times the population of the large institution. So great was the error introduced in this way that when we computed the population estimate for a group of eight of our enumeration districts in Central London, it proved to be negative; this is a degree of underpopulation not hitherto found in a census! This occurred because the large institutions, which had been omitted from the Abstract of Record, contained more than one-tenth of the total population.

We do not attach much blame to the enumerators for these errors. People in general, not just enumerators, feel quite naturally and sensibly that they

*Copies of these two tables are contained in the Appendix.

should not count anything twice. Where they have to count something twice, they need persuasion. The Abstract of Record needed a boldly printed notice, somewhat as follows: YOU COUNT THE OCCUPANTS OF ALL THE LARGE INSTITUTIONS IN THIS TABLE AS WELL AS IN THE INSTITUTION ABSTRACT. WE WILL ALLOW FOR THIS.

We did not examine all the enumeration record books in our sample. We merely looked at enough to establish that the errors were widespread. This meant that the GRO could not use the census officer's summaries of the abstracts. To put matters right, each and every enumeration record book would have needed careful examination, and between 5% and 10% would have needed correction. Clearly such an examination was not feasible, so the Preliminary Report was abandoned. The decision proved fully justified as GRO later discovered even bigger errors in the preliminary counts which would have been even more difficult to detect and rectify at an early stage.

5.2 Faults in the selection of the census sample

Experienced samplers have long been aware of the need to exercise a tight control over the selection of those units from the sampling population which are to constitute the sample. A theoretically sound method of selection is of no avail unless it is rigidly applied. Such a rigid application of the selection method will be easiest where the selection is made by the sampler himself; it will be most difficult where the selection is in the hands of other people, particularly if the amount of subsequent work involved depends upon which sampling units are selected.

The 1966 Sample Census provides some interesting, if scarcely surprising, examples of how the operation of the selection process deteriorated as control by the sampler (GRO) diminished. From the diagram on page 5 one can pick out those operations which could be most tightly controlled by GRO. First and foremost there was the selection of addresses from the 1961 computer record. Then there was the selection of one in ten of the inmates of large hotels and any private households associated with large institutions, which was carried out by GRO when the forms were received at headquarters.

Rather less control could be exercised over the selection of addresses of new buildings from the valuation lists, as this was done by the Inland Revenue in the local offices; but we have made no check on this selection. However, it is when we come to the selection of one in ten of the caravans on caravan sites and the selection of one in ten of the inmates in large hospitals, etc, that control became difficult. We shall now describe how the sample selection broke down in these 2 situations.

(1) CARAVAN SITES

Although the enumerator was given a random start between 1 and 10 to use in the systematic selection of every tenth caravan from his listing of all the caravans on a site, he was not told specifically in what order to list them. The instructions simply said: 'List every caravan on the site'. On 5 of the 25 caravan sites with any residential caravans—2 other caravan sites contained no residential caravans—our interviewers established that the sampling had gone wrong, in 4 cases due to the purposive listing or selection of the caravans. The fifth case is an interesting one which recurs in sampling where this

type of systematic selection is used. On this site the random start was 8, and the enumerator took the 8th, 16th and 24th caravans instead of the 8th, 18th and 28th. This use of the random start as the sampling interval is a relatively common error when sampling instructions are sent out to inexperienced people. Here it made no difference to the number of units, in this case caravans, selected, but generally it leads to too large a selection.

(2) HOSPITALS, SCHOOLS, ETC.

As has been said, we made no attempt to check the coverage at hotels etc. where all the inmates were asked to complete P forms; but instead we concentrated on the group of large institutions, comprising 160 hospitals, nursing homes, schools, etc. where the listing form L had been used to pick the sample of one in ten of the inmates who were to complete the census questions on P forms. (A copy of the listing part of the L form will be found in the Appendix.) The instructions to the managers, regarding the listing on the L form and the issue of P forms, read as follows:

Listing of names

The first stage is to list the names of—

- (a) each person alive at midnight on 24th April, 1966 who spends Sunday night 24th/25th April, 1966 (Census night) in this establishment; and
- (b) each person who arrives in this establishment next day (Monday) before noon and who has spent the night travelling.

Names of resident members of the staff (including yourself) and of their families should be entered on L.1 overleaf.

Names of all other people (for example, patients, students, inmates) should be entered on L.2. If, however, there are any separate private households here, the Enumerator will give different forms to them and the names of the people in them should not be entered on your lists. Non-resident members of the staff who happen to be present on duty on Census night should not be included.

For each list write the name of the first person in the space in column A line 1, and continue listing on succeeding lines in column A. When that column is complete go on to column B and so on. If necessary continue listing in the same way on supplementary forms which will be provided by the Enumerator.

Enter only one person's surname and initials in each space. For new-born babies write "Baby" and the surname.

Names must be entered systematically from any records you may have, such as staff registers, alphabetical lists or hospital ward lists.

You can start drawing up the lists in advance of Census day but before they are collected by the Enumerator you should bring them up to date by (a) deleting from them the names of any people who died before midnight on the 24th April, 1966 or who did not, after all, spend that night (24th/25th April, 1966) here, and (b) adding the names of any new arrivals, or children born before midnight on the 24th April, 1966. If a name is deleted do not substitute another name. If a name is added use the next vacant space on the appropriate L.1 or L.2.

Distribution of the "P" forms

The number of the sample line is shown at the top of each L.1 and L.2. You should give a "P" form to each person whose name occurs on that line. (If, for example, the sample line number for an L.1 is 6, you will give a "P" form to each staff member, etc., whose name occurs on line 6 on that L.1). Every person who receives a "P" form is required by law to fill it in. Where a person is incapable of completing the form, perhaps for reasons of age or illness, you should do it for them to the best of your ability.

Before you issue each "P" form please enter (a rubber stamp will do) the name and address of the establishment in the appropriate panel on the form.

The main purpose of our institution questionnaire was to check that this had been done correctly.

Simply by asking about the difficulties experienced by the person who had filled in the L form, our interviewers established that in at least 26% of these large institutions the listing had been done in a manner contrary to the spirit of the instructions, which stated that 'names must be entered systematically from any records you have . . .'. In these cases the person doing the listing had introduced a system of his own to ensure that certain classes of people did, or did not, fall on the sample line.

Very few managers seemed aware that they had done anything wrong. One such exception was a headmaster, who said he had 'worked a fiddle'. At first he had listed the staff alphabetically but then realised that, by changing the order of listing to one of seniority, neither he nor his wife would fall on the sample line. In contrast to the headmaster there were self-sacrificing listers like the mother superior and the matron who deliberately put themselves on the sample line. There was too the case of Mr. X who 'was positively gasping to get on the tenth line', and whose name was put on the sample line.

In the majority of cases the managers thought they were being helpful in not putting certain people on the sample line, such as the senile or the mentally ill. For example, one nurse said, 'I didn't put any surgical cases on the line as I thought you would be more interested in long-stay patients'. One manager tried to help by putting an inmate down twice because otherwise the listing would have ended one short of the sample line.

Another manager, by misreading the sample line number, had asked people on the wrong line to complete P forms, but he dealt with the situation by rearranging the listing so that these people appeared on the sample line. This was by no means the only case where the convenience of the manager played a part in the order of the listing. A teacher 'very craftily picked English speaking boys' to go on the sample line, while a nursing sister 'happened to have a group of staff round her desk', so she put them on the line. From the comments made it is clear that the enumerators themselves sometimes encouraged managers to list the inmates in the most convenient way.

Quite apart from trouble with the listing, the way in which the forms themselves were issued introduced some biases. Clearly the intention had been to use an equal quantity of L forms bearing each sample line number, and an equal number of forms had been printed bearing each of the numbers 1 to 10 as the sample line number at the top of section L.1. That this equality was by no means attained can be seen from the count*, by sample line number, of all the forms used in the census:

Sample line number given for L.1											
	1	2	3	4	5	6	7	8	9	Total	
Number of forms in which section L.1 was completed	1,337	1,252	1,169	1,205	1,196	1,116	1,122	1,035	1,055	1,093	11,580

The explanation for this distribution is quite simple. L forms arrived from the printers in packets of ten. The top form bore the sample line number 1, the second 2, and so on to the bottom form which bore the number 10;

*This count was made by GRO and kindly made available to us by Gerald Boston. Our own sample was not large enough to demonstrate this effect.

they were not in random order. Now the only instruction given to census officers about how to issue the forms to the enumerators reads as follows:

"The listing parts of these forms (L.1 and L.2) are printed with sample line numbers ranging from 1 to 10. The forms in your bulk supply will be in batches of 10 with the sample line numbers running consecutively from 1 to 10 and then starting at 1 again. As part of the procedure to obtain a truly representative sample, the number of L forms which you issue to an enumerator must be a number which is divisible by 3. For example, if you reckon that an enumerator will need about 20 L forms, you will give him either 21 or 24."

It is however at once apparent that this method will not lead to a random distribution in the use of sample line numbers, and that the most commonly used sample line number for L.1 will be 1. For example, where a census officer had only one L form type institution among all the enumeration districts for which he was responsible, he would, unless a very large institution was involved, break open a packet of forms and issue the top 3, bearing the sample line numbers 1, 2 and 3. But some institutions will be small enough to require only the first of these 3 forms. If one reconstructs what happened in this way, the origins of the distribution of sample line numbers becomes clear. It explains why the quantity of forms used decreases from sample line 1 to 10 with slight heaping at 4, 7 and 10.

The effect on the sample of issuing the forms in this way is rather curious, in that it differs for the staff and for the other inmates. The staff had been listed on section L.1 of the forms which bore the sample line number that we have been discussing. Inmates other than staff were listed on section L.2 of the forms, where there was a different sample number. But the 2 sample numbers on a form were always such that when added together the sum was 11. Consequently the distribution of sample line numbers on the forms used for listing the non-staff inmates at L.2 has the reverse trend to that for the L.1 portions. This is illustrated by the results of a count made by GRO, which is given below:

Number of forms in which section L.2 was completed	Sample line number given for L.2										Total
	1	2	3	4	5	6	7	8	9	10	
	2,014	2,085	2,128	2,272	2,217	2,319	2,370	2,334	2,430	2,410	22,579

As a result of this and what was found by our interviewers the data relating to inmates of hospitals, nursing homes, schools, and other institutions where the L form was used, must be considered unrepresentative. The institutional sample must have been appreciably affected by this, but fortunately this section of the institutional population accounts for less than 2% of the total population of England and Wales. Nevertheless we would recommend that this type of sampling, in which members of the public can influence the selection of the sample, should never be repeated.

5.3 Head of household and housewife

In the census the formfiller was merely instructed to 'begin with the head of household' without any definition of the term. GRO took the head of

household to be the person reported as 'head' unless this person was:

- (a) under 15 years of age, or
- (b) a visitor, or
- (c) a resident domestic servant, or a member of a domestic servant's family.

Unlike the census, most survey organisations define the head of household as the person, or husband of the person, in whose name the household's accommodation is owned or rented. We were in a position to find out how often the same person would be chosen as head of household by the 2 processes. The results of our comparison are comforting, in that there was over 99% agreement.

Now in 1966 GRO introduced a set of rules for selecting a 'housewife' for each *de jure* household. The 5 rules, taken in order, were as follows:

- (i) If the head of household is a woman then she is the housewife.
- (ii) If the head of household is a married man his wife is the housewife.
- (iii) If there are no females over 20 then the head is the housewife.
- (iv) If there are females over 20 related to the head then the eldest related female is the housewife.
- (v) If there are females over 20 but none related to the head then the eldest female is the housewife.

Domestic servants were not eligible for selection as the housewife because they were not members of the *de jure* household as defined by GRO for the household composition analyses.

The Market Research Society, who had pressed for the identification of a census housewife, were interested in how often the person selected by this process would be the same as the person who was mainly responsible for the cooking and shopping. Accordingly we identified the person with this responsibility in our Quality Check interview.

We found that in 3% of households the census rules do not identify the person who is mainly responsible for the cooking and shopping. For 1% of households this is because the rules select a woman over 70 but a younger woman undertakes these duties. In another ½% of cases the only adult female is a housekeeper who does not qualify according to the census rules although she is responsible for these duties. In a further ½% of cases the rules select a working female as housewife but the duties are undertaken by another non-working female.

Something might be done about the first 2 groups by introducing an upper age limit in some way and by removing the restriction on domestic servants. Prior to the census GRO had considered modifying the rules to deal with the last group but decided against it because of the additional computer programming involved. However it seems unlikely that any modification of the rules would improve the definition sufficiently to justify the increased complexity.

5.4 Occupation statements

For persons with a job during the week prior to census day Question 13(a) asked about occupation. There were notes in the separate leaflet.

13. (a) What was the person's occupation in the employment given in reply to question 12? Where appropriate state the material worked or dealt in and for workers at mines whether the job was mainly above or below ground. (See Notes.)	13.(a)
(b) If appropriate write "Apprentice", "Learner" (only if in skilled craft), "Articled clerk", "Articled pupil", "Student apprentice", "Graduate apprentice" or "Management trainee". (See Notes.)	.(b)

Question 13(a)—Occupation

- (i) Full and precise details of occupation are required. If a person's job is known in the trade or industry by a special name, use that name. Terms such as 'Scientist', 'Technician', 'Engineer', 'Machinist', 'Fitter', 'Foreman', 'Checker', should not be used by themselves. Greater detail should be given as, for example, 'Wood-working Machinist', 'Civil Engineer', 'Tool room Foreman', etc.
- (ii) For civil servants, local government officers and other public officials, give their rank or grade.

GRO then coded the answers into as many as 211 different groups, which are described in the 1966 *Classification of Occupations*. Clearly a detailed study of the problems connected with this question would be a major undertaking. All that our interviewers did was to ask the person concerned, who in many cases was not the original formfiller, one question, "I see your occupation was . . . , could you describe more fully what you actually do?", and the interviewers then probed for as much detail as possible. The additional information was then made available to GRO, who reached the following conclusions about the sample of 2,260* occupation statements:

Census classification incorrect because:	%
Quality Check provided additional information	10·7
GRO processing error	4·1
	14·8

5.5 Address five years ago

Question 6 on the census form dealt with each person's usual address 5 years earlier, that is on 24 April 1961, which was the day after census day in 1961. In answering this question the formfiller had to take into account the answers to the 2 previous questions, so all 3 are reproduced below, together with the notes which define 'usual address'.

*Our B and C subsamples before the multichance rejections had been made.

4. If the person usually lives here, write "Here"; if not write the usual address in full. (For people living away from home, children at boarding school, students, members of H.M. Forces etc. See Notes.)

4.

5. If the person's usual address one year ago (on 24th April, 1965) was the same as that given in reply to question 4 write "Same"; if not write the usual address on 24th April, 1965. For children now under one year old write "Under one".

5.

6. If the person's usual address 5 years ago (on 24th April, 1961) was the same as that given in reply to question 5 write "Same"; if not write the usual address on 24th April, 1961. For children now under five years old write "Under five".

6.

Question 4—Usual Address

- (i) For school children, students, etc., who live away from home during term, give the home address and not the term time address.
- (ii) (i) For members of H.M. Forces who live in married quarters give the address of the married quarters.
- (2) For members of H.M. Forces who do not live in married quarters—if they live on the station give the address of the station; if they 'live out' give the living out address.
- (iii) For people present on Census night who live away from home during the week give the address from which they usually go to work, but if the head of the household lives away from home during the week write 'Here' for the usual address.
- (iv) For people with no settled address write 'None'.
- (v) For boarders who have a settled address with this household write 'Here'.

Ideally we would have checked the answers to both Questions 5 and 6 but this is difficult as both depend upon memory. So we concentrated our attention on Question 6 since the existence of the 1961 census records offered the possibility of a first class check on the accuracy of the answers for most persons. The exceptions were:

- (a) Those born since census day 1961, i.e. the under fives,
- (b) Those absent from their usual address 5 years ago (i.e. census night 1961) unless they had formed part of the 10% sample enumerated on the longer form, which dealt with absentees as well as those present,
- (c) Those giving a usual address 5 years ago which was outside England and Wales.

Apart from these cases people ought to be found at the Question 6 address in the 1961 census records.

In making the check GRO searched for the 1961 census form relating to the address given as each person's usual address 5 years ago and noted whether or not that person or any member of his family had been enumerated there in 1961. Because of the laborious nature of this check it was confined to the 5,417 people shown as present on the B subsample of H forms. The results of the search are shown in Table 5.1.

Lines (i) and (ii) of the table show the 2,882 non-migrants and 1,611 5 year migrants who were found where they were said to be in 1961. The 3 other cases should have been non-migrants.

Lines (iii) and (iv) probably do not contain any errors because the 1961 form proved to be a short one on which absentees were not recorded and we found some other family member there or that the whole household had been absent on that occasion. So these people were probably absent from their usual address at the 1961 Census.

Possibly a few of the cases shown on line (v) could be due to addresses being wrongly described as vacant in the 1961 Census where the household was really absent, but the majority are likely to be errors. Certainly the majority of line (vi), where other people were found but where there was no trace of the person with whom we were concerned, are errors.

TABLE 5.1
Result of searching for people at their 'usual address 5 years ago'
in the 1961 census records

Non-institutional population—England and Wales

Result of search	According to 1966 Census	
	Non-migrant	Five year* migrant
Person found		
(i) At 1966 usual address	2,882	3
(ii) At usual address 5 years ago	—	1,611
Person not found, but address found		
(iii) Other family members there	27	23
(iv) Completely absent household	13	18
(v) Vacant	7	18
(vi) Other people there	84	158
Neither person nor address found		
(vii) Address in England and Wales	10	57
(viii) Address outside England and Wales	—	115
(ix) Child under 5 years	409	—
Total persons present at 1966 Census	3,432	1,985

*The address given at Question 6 differed from that given at Question 4.

From these results we would suggest that the correction factor for the number of 5 year migrants can be taken as $(1985 + 7 + 84 - 3) \div 1985 = 1.04$. Of the 1,985 persons shown as 5 year migrants on the census forms 3, we say, were not migrants at all, and 158 (8%) had a different usual address 5 years ago to that given in Question 6. What their address really was we

do not know so we cannot say anything more about the effect of these errors. Readers should note that this correction factor makes no allowance for any errors introduced during the processing of the data.

With the advantage of hindsight we now regret that we did not ask more questions in our interview about people's movement around 1961 and so improve this, in many ways, first class check even if it had meant cutting our interview in other directions. We might have established where the missing people were in 1961 and we should have firmer evidence as to the reasons for the errors. Luckily we stumbled on the probable explanation for a group of errors which we might otherwise have attributed to memory trouble.

While we would suggest that the 3 cases where non-migrants were wrongly recorded as migrants and the 158 migrants with the wrong address were mainly due to memory trouble or sometimes to trouble with applying the usual address concept retrospectively, we do not believe these explanations hold for the majority of the 91 cases recorded as non-migrants where no trace of the person could be found. Our evidence for this belief is as follows.

Although we had not asked these 91 people in our interviews where they were 5 years ago, in 22 cases chance comments recorded in answer to other questions established that they were definitely migrants. Most of the households concerned had moved into their 1966 addresses either 1 or 2 years before the census and quite clearly knew that they were elsewhere 5 years ago. So we would conclude that most of these 91 cases are not memory errors but formfilling mistakes. The clue to what happened is provided by another household, not as it happens in the B subsample. The formfiller had given his former address for himself in answer to Question 6 but then had wrongly answered 'same' for the rest of his family. What he meant was that they were at the same address as he was. The answer 'same' in Question 6 should have meant that a person's address 5 years ago was the same as his own address one year ago which was entered immediately above on the form. This is a very understandable error when one remembers, as we have since established, that almost all formfillers fill in the answers one question at a time for all members of the household working across the form: formfillers do not tackle all the questions for one person at a time by working down a column at a time. Our 91 cases involve some households where all the members have the answer 'same' and we believe that the formfiller used 'same' to mean that they were all at the same address in 1961; unfortunately it was not the same as their present 1966 address.

5.6 Date of birth

The decision to introduce a question about date of birth instead of age in the 1966 Census was made as a result of evidence obtained in the 1961 post-enumeration study. The 1961 Census had asked for 'age in years at last birthday and completed months since then' while the post-enumeration inquiry asked for date of birth, but when both sets of answers were checked against birth certificates it was found that the date of birth question had produced rather more accurate results. So date of birth was substituted for the age question in 1966.

Our check on date of birth followed substantially the same pattern as previous checks on age, except that we measured the additional errors

introduced during the processing of the information. The checking process involved finding and matching the appropriate birth certificate for each person shown as present on the census household schedule. To help GRO in searching their records for the birth certificates, additional information was collected during the Quality Check interview; this included the maiden names of married women and whether the formfiller had any doubts about the date or place of birth of anyone in the household. Ultimately, however, the success of such a matching operation depends on making repeated attempts to find a match and the following up of all possible clues so that the number remaining unmatched is the irreducible minimum. Because of the care and effort required, we limited this part of our inquiry to a small subsample consisting of the 2,763 persons in half the enumeration districts of the A subsample (see page 17), that is to about one-sixth of all the people covered by the Quality Check.

Arrangements were made to search for the birth certificates of all persons born in the United Kingdom, Eire and the Channel Isles, but nothing could be done about the 113 (4%) persons born elsewhere. For the 2,650 persons, where the search was possible, the results are set out in the upper part of Table 5.2.

First we have a group of 52 persons whose birth certificates remained untraced in spite of repeated efforts to find them. In each case the search had covered all births registered for a period of 5 years on either side of the date given on the census form. Where this search failed, an attempt was made to find the person and his or her date of birth in the National Health Service records and sometimes in the 1961 Census records, before searching once again for the birth certificate.

Next in the table are 8 cases where the original answer on the census form had been correct but GRO had introduced errors in punching the data on to cards. No coding of the answers had been done and the punch operator was required, as she punched, to convert on sight the day and month of birth into a 3-point code, distinguishing people with birthdays on or before 24 April, those with birthdays between 25 April and 30 June, and those with birthdays in the period July to December. Five of these coding mistakes involved people with birthdays just before, just after, or on census day. The other 3 punching errors were more serious, one man being rejuvenated to the age group of his children.

The table also shows that there were 2,417 cases where the census and birth certificate agreed completely as to day, month and year of birth; and it then shows the nature of the discrepancy for the 173 cases where there was a disagreement.

Over half the disagreements are of no importance since the greatest detail in which the census tables use the date of birth information is in the form of single year age groups. All but 3 of the 90 discrepancies involving only day and month have no effect on the published statistics. In the lower part of the table only these 3 contribute to the 93 errors affecting single year statistics. The major contribution to the errors that matter consists of the 78 cases where the year disagreed. Two further groups contribute. One group consists of 4 out of the 5 cases where there was a blank on the census form and GRO had imputed the age in years incorrectly, being as much as 11 years out in one case. The final contribution to the errors that matter consists of the 8 punching errors already discussed.

TABLE 5.2
Accuracy of Question 7—DATE OF BIRTH

Results of comparing census with birth certificate	Number
Birth certificate not traced	52
Error introduced by GRO during punching	8
Complete agreement as to day, month, year	2,417
<i>Census disagrees with birth certificate in respect to:</i>	
Day only	63
Month only	18
Month and day	9 } 27
Year only	67
Year and day	5
Year and month	1 } 78
Year, month and day	5 }
Census form blank	5
Total persons where comparison could be attempted	2,650
Non-institutional population—England and Wales	
Resulting error in published census statistics	Number
No error in published statistics	2,505
Single year statistics in error only	64 } 93
Five year statistics in error only	29 }
Birth certificate not traced	52
Check impossible, person born outside U.K. or Eire	113
Total sample—persons present at census	2,763

Altogether, then, we established 93 errors (3.5%) affecting the published statistics for one year age groups and 29 errors (1.1%) affecting the statistics for 5 year age groups. However the true error rates must be slightly larger, partly because we would expect a rather higher error rate among the 4.1% of the sample born outside the United Kingdom and Eire, but mainly because of the 2.0% of birth certificates that remained untraced. We say 'slightly larger' because there is good evidence to suggest that the majority of these 52 cases (the 2% where birth certificates were untraced) are due to other causes than the date of birth on the census form being more than 5 years out. In 10 cases we know that other information was faulty since maiden names or christian names were missing, or there was evidence to suggest adoption. In another 17 cases consisting of persons born before the outbreak of war, we found exactly the same date of birth in the National Health Service Central Register, which means that the same date was given in an enumeration more than 26 years before the 1966 Census. Many of the other cases involve very common names, e.g. John Smith, where any error in day or place of birth would make a match impossible. We are left with 4 cases where we suspect there may be an error and 8 cases where there was a different date of birth in the National Health Service Central Register and we feel there is good reason to expect an error. Thus we would guess that about a quarter of the 2% of untraced birth certificates are due to errors in the date of birth.

given on the census form. Thus our best estimate of the error rate would be 4% for the one year age groups and 1½% for the 5 year age groups. These estimates are for the non-institutional population. We would remind readers that there is good evidence elsewhere (page 101) that the age distribution of the institutional population is in error due to bias in the sampling procedure.

TABLE 5.3
The variation in error rate with age on four occasions
Errors which affect single year age groups

	Error rate for different age ranges				
	0-14	15-34	35-64	65 and over	All ages
1951 Census* (Age in years and months)	2.3% (1,534)	4.7% (1,457)	8.6% (1,639)	10.0% (462)	5.7% (5,092)
1961 Census* (Age in years last birthday and completed months since then)	1.6% (3,998)	4.6% (4,469)	7.9% (7,108)	11.1% (1,837)	5.9% (17,412)
1961 Post-Enumeration Inquiry* (Date of birth)	2.8% (3,929)	3.3% (4,408)	6.1% (6,983)	10.3% (1,786)	5.0% (17,106)
1966 Census (Date of birth)	2.0% (598)	3.1% (742)	3.2% (941)	8.8% (317)	3.6%† (2,598)‡

*From the General Volumes.
†5.3% of the processing errors introduced by GRO are excluded. The other inquiries did not cover this source of error.

‡Excluding the cases where the birth certificate was not traced.

Table 5.3 shows the variation in the rate of error established with age both for this inquiry and for 3 previous inquiries. Although the inquiries are not exactly comparable the results show conclusively that asking for date of birth produces better data than asking for age, with the possible exception of the children. The gain in accuracy achieved was larger than would have been predicted from the 1961 post-enumeration inquiry results, particularly for the 35-64 age range.

HOW THE ERRORS AROSE

First we shall account for the 93 errors that matter in terms of the people involved and whether they filled in the form. In 19 cases formfillers gave their own dates of birth incorrectly; another 19 mistakes were made by a husband or wife who gave a wrong date for their spouse; and in 16 cases parents gave wrong dates for their children. A further 17 mistakes occurred where the formfiller was less closely related to the person whose date was being recorded, for example a landlady who gave details of her boarders or a man who gave the dates of his wife's parents. Then there were 10 errors where the enumerator had filled in the form and the 12 errors in which GRO played a part.

Since the birth matching could only be carried out after the Quality Check interview, we were not able to ask the formfiller or the person whose date of birth was wrong how the errors occurred. But one can deduce a certain amount from the nature of the errors.

Although hardly ever affecting the published statistics, the errors which only affect day and month are of some interest and we will deal with them first. Most easily explained are the errors involving the month only. Almost always the dates are one month out and, while not occurring for people born in January, February, November and December, are heaped towards the middle months of the year. Clearly these errors have arisen in translating a named month into the appropriate number between 1 and 12 (e.g. 2 July 1916 being wrongly recorded as 2/6/16).

It is less easy to explain the errors in day only but there are some important clues as to what occurred. Of 63 cases where there was an error in the day only, a further erroneous date of birth was given for someone else in the household in as many as 21 cases, which points to general carelessness on the part of the formfiller. This is confirmed by the nature of many of the errors. For example there were 11 cases where the day was wrong because the day of birth of another member of the household had been repeated. Then there were 10 cases where the month figure had been repeated for the day, e.g. 1/1/05 for 2/1/05 and 26/6/38 for 25/6/38. On the other hand there were 2 cases where the formfiller said during our interview that a birth certificate was in error, and we later found a disagreement, i.e. 13 for 15 and 20 for 28. These 2 cases point to copying mistakes during the registration process, and there are probably more since we have found 13 other disagreements of the type, 7 for 1, 5 for 3, etc., which are the common copying errors. We think that the majority of errors in the day only group are of a clerical nature arising during the formfilling or the registration process.

The small group of errors involving both day and month but not year included some clear cases of transposition, e.g. 1/4/1895 for 4/1/1895 and 14/5/1898 for 15/4/1898. Another error, involving day and month was one case where, during our interview, we were told that one household member was known to have been registered rather late by his mother who, because she was ashamed of this, had given the registrar a later date than the true date of birth.

So far we have been dealing with errors involving only day and month which, apart from 3 cases, do not affect the published statistics. Of the other 90 that do have some effect we have already commented on the 4 blanks for which wrong guesses were made by GRO and the 8 other processing errors GRO introduced. Now we shall consider the remaining 78 cases where the year of birth had been given wrongly on the census form which account for most of the errors that matter. In doing so it is instructive to compare the pattern of errors found on this occasion with that found on the 2 previous censuses.

Table 5.4 shows the number of persons reported as too old or too young by one year, 2 years, and 3 or more years on 4 different occasions. Although the same people are involved in the 2 sets of 1961 data the General Report gives no indication of the extent to which errors occurred for the same people on the 2 occasions. This is unfortunate, as such an analysis could be very revealing. Nevertheless the last column of the table does show how the



TABLE 5.4
The pattern of errors on four occasions

	Person recorded as being:							Total checked	Ratio Too old Too young		
	Too old by			Correct age or year	Too young by						
	Three or more years	Two years	One year		One year	Two or more years	Three years				
1951 Census* (Age in years and months)	3	4	180	4,801	82	16	6	5,092	1.8		
1961 Census* (Age in years last birthday and completed months since then)	41	50	468	16,377	359	55	62	17,412	1.2		
1961 Post- Enumeration Inquiry* (Date of birth)	24	37	246	16,246	435	51	67	17,106	0.6		
1966 Census (Date of birth)	4	5	18	2,515	36	9	6	2,593†	0.5		

*From the General Volume.

†Excludes the 5 blanks.

substitution of date of birth for age in the census question fundamentally alters the distribution of errors. When age is asked for, the ratio of those found to be too old divided by those found to be too young is greater than one. When date of birth is asked for, the ratio is nearer a half.

We think that much of the explanation lies in miscalculations made in translating dates of birth into ages and vice versa, combined with rounding up of ages. Certainly we know that in 1966 the formfiller sometimes worked out the date of birth from the age, and sometimes from the wrong age into the bargain. For example one formfiller told our interviewer that she realised she had done her arithmetic wrong with her mother's age. But the age she then quoted was a year out and we found a discrepancy of 2 years with the birth certificate. So an error of 2 years had been made by using the wrong age and then doing the subtraction sum incorrectly. Apart from being given ages by some people who tend to remember ages rather than dates of birth, some formfillers and enumerators may well ask 'When is your birthday?' and 'How old are you?'.

The calculation errors arose because formfillers merely subtracted the age in years from 1966 to get the year of birth. Such a sum gives the right answer only for those born between January 1st and census day; for those born later in the year the calculation gives a year of birth one year greater than it should be. Of course the subtraction sum becomes even more difficult where a person was born before the turn of the century. Our results suggest that in some such cases the formfiller gave up the attempt to do the sum and so produced the undue number of rounded years we found for the last century, i.e. 1885, 1890, 1895 and 1900.

We believe that the formfiller sometimes cancelled out an error in the age he was using by then making a wrong calculation. This, we think, helps to explain the distribution of one year errors we found for different months of birth. We would suggest that the tendency to anticipate a birthday is greatest among those with a birthday in the 6 months after census day. Support for this comes from the pattern of correct and incorrect years we found among children in households with errors.

Type of error	Month of birth												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	All
True year plus one recorded	2	—	3	1	2	2	2	3	2	3	9	7	36
True year minus one recorded	3	1	1	2	1	1	2	4	2	—	—	1	18

Another calculation which would seem to lead to errors is the derivation of one date of birth from that of another person in the household, using the difference in ages to the nearest year.

Not all the errors arose in these ways. Some, particularly the large ones, are recording errors of a clerical type similar to those we found for the day only errors. One such error concerned the youngest child of 4; the children were shown on the form as born in 1945, 1946, 1948 and 1942. The last date should of course have been 1952. Occasionally the age crept into the year given, e.g. 1932 given for someone aged 32.

This is as far as we can go in explaining the origins of the errors we found. Generally there does not seem to be much that can be done to improve the high level of accuracy of the age statistics. The slight increase in the error rate for children in 1966 over 1961 leads us to wonder whether it is not in fact better to ask for age last birthday when asking parents for information about their children. But on a census only one question can be used and undoubtedly in this country this should be date of birth.

5.7 A check on the coverage of the electoral register

When it became known that the Social Survey would be carrying out this Quality Check, the Home Office approached us to see if a check on the coverage of the Register of Electors could be incorporated. Our Quality Check provided an almost ideal opportunity for such an inquiry and the GRO readily agreed to the incorporation of the additional exercise, as they have a considerable interest in the accuracy of the Register, which plays an important part in their intercensal estimates of population.

Our purpose was two-fold. Firstly, we intended to find out what proportion of people who were eligible to vote and were resident in England and Wales on the qualifying date, October 10th 1965 for the 1966 Register, failed to get included on the Register. This initial loss is the most serious one since these people were effectively disfranchised for the year in which the register was in force. Secondly, we hoped to be able to estimate the extent

to which the Register was out of date when it came into force on February 16th 1966. By out of date we mean that some people will no longer be living at the address at which they were registered. Then there was a further loss during the life of the Register, caused by removals between February 16th 1966 and February 15th 1967.

One reason why the Quality Check was a particularly suitable inquiry on which to base an investigation of the Register was that the interviewers had available answers given on the census forms. These included some of the information which was needed in order to check the Register, in particular the names and ages of every individual in the household. The additional information necessary to decide whether a person was eligible to be on the Register was their nationality and their usual residence on October 10th 1965 (the qualifying date for the 1966 Register). These 2 questions fitted very naturally with questions about a person's usual residence in April 1965 and April 1961 and with questions about birthplace, which were all discussed during the interview for the Quality Check. Another advantage of drawing a sample of households who had already completed a census form was that most of the relevant information was available, even for individuals we failed to interview, and a more elaborate analysis of the effect of non-response than is possible on many inquiries could therefore be made. Finally, the interviewing for this part of the survey was completed within 3 months of the General Election on the 31st March 1966, so most informants knew from recent experience whether or not they had 'had their vote'. This timing was quite fortuitous, since the planning of the Quality Check and the decision to include questions about the Electoral Register were made before the date of the Election was known. It did, however, create a practically ideal set of circumstances in which to undertake such an investigation. The interviewers explained during the interview that we were making a check on the Voters List to see how many people get missed off and, also, that a voter should be on the Register for his address on October 10th last year. Any comments were noted and, presumably because of the recent election, most people did make some comment. The remarks made enabled us to say with a fair degree of certainty why some individuals had been missed off the form. Formfillers were also asked whether there were any other addresses where they thought someone in the household might be on the register. This information and comments about having had a postal vote or going to the area of a previous address to vote were useful in sorting out what had happened.

The data collected enabled us to restrict our further investigations to those people who were eligible to be on the Register of Electors 1966. All the information for each individual who was usually resident in the household and who was either correctly included in the census, or who should have been included but was erroneously omitted from the enumeration, was examined to decide whether he qualified.

A search was then made in the Register for each eligible person at the address which had been given to the interviewer as his or her usual residence on October 10th 1965. Where a person's usual residence in April 1965 and April 1961 was different from the present address a search was also made at both these addresses. An extra search was made at any second addresses for people who told us, during the interview, that they regularly had a different

address during part of a week or at different times of the year, and also at any other addresses where the informant thought the person might be on the Voters List. Because of the large volume of very careful work involved in this searching operation the sample used for this part of the inquiry was restricted to subsample A. The results are summarised in the table below, which also shows the rate at which the register goes out of date. On the basis of these results and remarks made by the people who were interviewed, some recommendations for improving the Register were made to the Home Office; further details will be found in the report.¹²

The Proportion of Eligible Electors* Registered and Still At the Qualifying Address			
On the qualifying date Oct. 10th 1965	When the Register came into force Feb. 16th 1966	Halfway through the life of the Register August 1966†	At the end of the life of the Register Feb. 15th 1967†
96%	93%	89%	85%

*Excluding the institutional population.

†Estimated figures.

5.8 The bias in the 1961 census sampling

We think that we may be able to throw some light on the long standing mystery of the bias in the 10% sample of the 1961 Census. In that census there were 2 types of household form. The intention was that 90% of households should receive a short form, the E 90, which contained relatively few questions, while the other 10% of households would receive a longer form, the E 10. Packs of mixed forms, arranged (with a random start) so that nine E 90 forms were followed by an E 10, were issued to the enumerators, who were instructed to use them strictly in order. Where a household contained too many people present on census night for them all to be entered on one form the enumerator had to issue another one, or others, of the same sort from the spare packs which he carried.

The households enumerated on E 10 forms should have constituted a 10% sample of all households. At first sight this seemed to be so, for the number of households enumerated on E 10 forms was very close to one ninth of the number enumerated on E 90 forms. But alas, when the 2 groups of households were compared in terms of the data collected for both groups, there were clear signs of bias. The groups differed markedly in 2 important respects: the number of persons present on census night (the *de facto* household size) and the number of rooms occupied by the households. Furthermore the trend in the bias with the number of rooms occupied was similar within each household size group. The effect of this bias is shown in the diagram on page 117, which is reproduced from the 1961 General Report (page 89). In commenting on this diagram, the General Report states (page 93):

"For households in all dwellings there is under-representation of one-person households and of households with 7 or more persons. For this group there is also a clear gradient from under-representation of households occupying one room (10% under-represented)

¹²*Electoral Registration for Parliamentary Elections*. P. G. Gray and Frances Gee, H.M.S.O., May 1967.

through almost correct representation of households with five rooms to increasing over-representation of households occupying large numbers of rooms. The over-representation reached 40% for households which occupied 15 or more rooms. This gradient from under-representation of households occupying few rooms to over-representation of households occupying many rooms is present for most sizes of household."

The General Report admits (page 93) that 'it has not been possible to obtain any objective evidence as to the basic cause or causes of the bias which has been found'. It suggests that part of the bias might have arisen because the enumerators switched the order in which they issued their forms. But since the pattern of the bias proved to be the same in all regions, such an explanation would imply a widespread, nationwide, deliberate disregard by the enumerators of an instruction which was given great weight in their handbooks. Not only does this explanation seem unlikely, but it does not fit all the facts.

Evidence for another explanation lies in one very important difference between the E 10 and the E 90 forms: the sample E 10 form had lines* for only 6 persons present on census night, while the E 90 form had lines for 8 persons present on census night. In Table 5.5 we give the distribution of households by size for the E 90 and E 10 households; these distributions can be derived from data given in the 1961 General Report and in the Housing Tables. In the first column of the table we have given the ratio b_r/a_r , i.e. the figure in the fourth column divided by the corresponding figure in the second column. These figures confirm the under-representation in the 10% sample of one-person households and of households with 7 or more persons; had these groups been adequately represented, then the ratios would all have been 9.0.

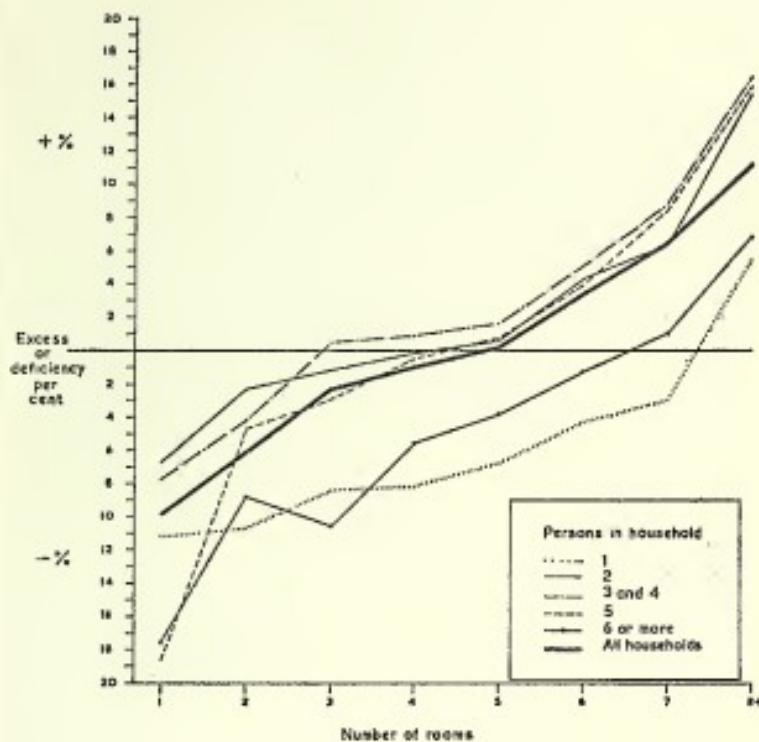
In the third and fifth columns we give the ratios a_{r+1}/a_r and b_{r+1}/b_r . At once the figures reveal a sharp discontinuity in the distribution of households by size, between households with 6 and 7 persons on the E 10 form (which had 6 spaces) and between households with 8 and 9 persons on the E 90 form (which had 8 spaces). The table also shows that in 1966 there is a discontinuity between 6 and 7, when the form had 6 spaces. What is more, the 1951 results show a discontinuity between 7 and 8, and on that census form there were spaces for 7 persons. Taking all the evidence of the table together, there can be little doubt that the distribution of households by size is influenced by the number of spaces provided on the household form. Just how does this come about?

We can think of only one explanation of what happened in 1961. If an enumerator approached a building containing 7 or 8 persons, but more than one household, and was due to issue an E 90 form with 8 spaces, then all the persons could be entered on the form. (The formfiller was not given any definition of what constituted a household.) If, however, the enumerator had been due to issue an E 10 with 6 spaces, then one form was not enough, and he stood a much greater chance of discovering that there was more than one household. In this case only one household would get an E 10 form, and the other(s) would get the E 90 form. Such an explanation of what might sometimes have occurred has the merit of accounting not only for the difference in the household size distribution between those enumerated

*Unlike the 1966 forms which had a column for each person, the 1961 forms had a line for each person.

England and Wales

Diagram A Comparison of full count and sample;
 Percentage increase or decrease by size by rooms occupied:
 Households in all dwellings



Source - 1961 Census, Great Britain, General Report, Page 89.

Table 5.5. The influence on household size of the number of spaces provided on a census form

Number of persons present on census night <i>t</i>	Number of <i>de facto</i> households								
	1961 CENSUS				1966 CENSUS		1981 CENSUS		
	Ratio $\frac{b_1}{a_1}$	10 per cent sample	Ratio $\frac{a_{1+1}}{a_1}$	10 per cent sample	Ratio $\frac{b_{1+1}}{a_1}$	<i>t</i>	10 spaces on form <i>j</i> *	Ratio $\frac{a_{1+1}}{a_1}$	10 spaces on form <i>j</i> *
		<i>a</i>		<i>b</i>			<i>c</i>		<i>d</i>
1	9.9	180,114	2.45	1,779,653	2.22	2,350,090	1.99	1,403,349	2.58
2	8.9	441,156	0.78	3,942,117	0.76	4,694,900	0.69	3,627,051	0.91
3	8.8	342,765	0.80	3,010,896	0.80	3,262,270	0.83	3,312,184	0.75
4	8.8	274,214	0.48	2,408,877	0.48	2,716,460	0.49	2,491,193	0.51
5	8.8	131,867	0.43	1,162,418	0.43	1,330,940	0.46	1,259,351	0.45
6	8.7	67,048	0.37	498,610	0.43	507,450	0.46	567,367	0.45
7	9.9	20,387	0.43	208,314	0.42	211,840	0.45	256,393	0.42
8	10.5	9,038	0.44	85,727	0.40	94,760	0.45	106,988	0.48
9	9.7	3,964	0.46	38,109	0.48	43,950	0.46	50,910	0.46
10	9.9	1,832	0.44	18,117	0.47	(D.87)		23,535	0.47
11	10.4	811	0.45	8,435	0.48	8,820		11,084	0.48
12	9.6	422	0.52	4,040	0.48			5,267	0.48
13 or more	14.8	228	0.54	3,378				4,196	0.80
TOTAL	9.0	1,464,416	-	13,176,481	-	16,369,580	-	13,117,868	-

* Not all of these spaces will sometimes be used to record objectives.

on the 2 sorts of form but also for the gradient in the number of rooms occupied for each household size. Our 1966 results have shown (Table 3.1, page 35) that splitting even a small number of pseudo-households has a marked effect on the number of one person households. Doubtless other things went wrong with the sampling in 1961, but we think that this may go some considerable way to explaining the bias in the sampling.

What emerges from our investigations is that the 10% sample in 1961 was biased in a complex way which could not be corrected simply by re-weighting the results on the assumption that the sample contained an unrepresentative selection of households. This is the kind of situation where the power of the computer has made it all too easy to introduce error by wrongly reweighting one's data. Fortunately GRO resisted the temptation to reweight the 10% sample and settled for publishing the unweighted results with a kind of do-it-yourself correction kit.* Unfortunately some people seem to have used the bias factors to make corrections.†

*The bias factors calculated by GRO, which are given in the census volumes, involve among other things 6 groups of household size (1, 2, 3, 4, 5, 6 or more), the last of which is rather unfortunate when one remembers the marked discontinuity between 6 and 7 persons.

†See, for example, *Ministry of Labour Gazette*, November 1965, "Comparisons between Census of Population and Ministry of Labour estimates of the working population".

PART VI THE ENUMERATORS

6.1 Who are the enumerators?

The enumerator is a key figure in a census, but we do not know enough about him. We think that in a future census some useful data could be obtained by interviewing a sample of enumerators after census day; and more could be learnt from observing their work during the census itself. Since we were unable to do these things in 1966, what we know about the enumerators is limited to the information on the application forms they completed when applying for the job, and to what we have learnt from studying both their enumeration record books and the H forms for which they were responsible.

The enumerators were enrolled locally by the census officers, but a standard application form was used, which asked for age, sex, occupation and previous experience of census work. Table 6.1 shows the distribution of the Quality Check sample of 300 enumerators by age and sex.

TABLE 6.1
Age and sex of enumerators

Age	Men		Women		All	
	No.	%	No.	%	No.	%
Up to 19	4	2	5	7	9	3
20-29	44	19	19	27	63	21
30-39	45	20	16	22	61	20
40-49	73	32	21	30	94	32
50-59	50	22	7	10	57	19
60-69	13	5	2	3	15	5
Not stated	—	—	1	1	1	—
All ages	229 (76%)	100	71 (24%)	100	300 (100%)	100

Readers may have noticed that whereas we refer to a Social Survey interviewer as 'she', we refer to an enumerator as 'he'. This is because all our Social Survey interviewers were women, but 76% of our sample of census enumerators were men.

Census officers had been recommended to recruit enumerators in the age range 20-60, but 8% of our sample fell outside this range; the youngest enumerator in our sample was 17, and the oldest 67.

Our analysis of enumerators' occupations is limited by the small amount of detail given on the application forms. Whereas on the census form itself civil servants and local government employees are asked to give their grade or rank, this information was not asked for on the application form for enumerators, and few volunteered the information.

TABLE 6.2

Occupations of enumerators

Occupation	Number	%
Teachers	18	6
Local government	134	45
Civil servants:		
Ministry of Pensions and National Insurance	17	6
Post office	16	5
Customs and Excise	10	3
Inland Revenue	11	4
Other civil servants	38	13
Other occupations	34	11
Not working:		
Housewife	17	6
Retired	4	1
Student	1	—
	300	100

As many as 93% of the enumerators are working. Teachers and other local government employees account for over half, with civil servants accounting for another 31%. Naturally the civil servants come mainly from departments with local offices.

Just under half the enumerators had had previous experience of census work, 46% having worked on the 1961 Census.

TABLE 6.3

Enumerators' previous census experience

Previous census experience	Number	%
None	151	51
1961 only	112	37
1961 and 1951	28	9
1951 only	6	2
Year not stated	3	1
	300	100

6.2 How they were trained

The training process started with a 7 day course given by specialists from Census Division to 30 instructors who were all members of GRO though not necessarily of Census Division. These 30 instructors briefed the 1,293 census officers at weekend courses up and down the country. Most instructors gave 2 courses, there being 58 courses in all and an average of 22 census officers per course. The census officers had been recruited for the census period on a part-time basis and were mainly the local Registrars of Births and Deaths, who are controlled by GRO. These 1,293 census officers had then to recruit and brief the 29,338 enumerators, an average of 23 enumerators per census officer. Each enumerator was given a copy of the handbook 'Instructions for Census Enumerators' which is reproduced in the Appendix of this report, and the census officer was required to give each enumerator at least 4 hours briefing consisting of 2 hours on each of 2 evenings. Thus the amount of training received by an enumerator was small indeed.

This long chain of instruction for the enumerators is a considerable source of weakness for the census, and contrasts with the conditions under which we at Social Survey operate when conducting sample surveys; our researchers personally brief all their interviewers (who have already been trained in general interviewing techniques), and we hope that this method helps to instill in the interviewers an enthusiastic approach to their task. The television-programmes of instruction for the enumerators which are planned for the 1971 Census are a laudable step in the right direction. The next step would seem to be a programme for formfillers.

Our observation of the 1966 training process could only be very limited, but we did attend the 7 day course for instructors and 2 of the courses for census officers. We were not able to attend any of the enumerator briefings as by this time we were involved too much with preparations for the Quality Check. We would not in any case have wanted to attend the briefings in our sample areas for fear of affecting the training given and the representative nature of our sample.

6.3 Contact with the public

As has been said, most enumerators had full-time jobs, and their duties therefore had to be performed in the evenings and at weekends. They were only expected to devote one working day, the whole of Monday 25th April, to the census. Their timetable was as follows:

2 April	Saturday	} Deliver preliminary leaflets
to 7 April	to Thursday	
12 April	Tuesday	} Deliver census forms
to 21 April	to Thursday	
24 April	Sunday	Census day
25 April	Monday	} Collect census forms
to 28 April	to Thursday	
9 May	Monday	Hand over completed material to census officer on or before this date

In view of the timetable outlined above, we were not altogether surprised to find that 36% of formfillers told us that there had been no contact at the delivery stage between the enumerator and any member of the household; similarly at the collection stage there had been no contact in 33% of cases. Taking both the delivery and collection stages together, formfillers claimed that in 21% of cases there had been no contact between the enumerator and any member of the household on either occasion. This proportion rises to 30% for households in multi-occupied dwellings. Furthermore one has to remember that in many cases where there was contact, the contact would be with the housewife rather than the husband who is usually the formfiller. This lack of contact is a fundamental fact that should be kept in mind when planning the census, for to plan on the assumption that the enumerators will be in a position to question all householders is absolutely unrealistic.

This will be just as true in 1971 where, although the addresses to be visited will be closer together, the enumerator will have on average about 3 times as many households to deal with compared to 1966.

Although not trained in any way to do so, the enumerator quite often had to adopt the role of interviewer. For some 3% of households the enumerator had filled in the form completely, this proportion rising to 6% for households in multi-occupied dwellings. Forms filled in by the enumerators tended to have a high proportion of errors. For example, where the enumerator had filled in the form, Question 24(a), dealing with rooms, was wrong in 36% of cases compared with 17% for all forms. Perhaps this is not surprising since the enumerator had not been trained as an interviewer and the questions were not in a suitable form for interviewing. The questions are designed to be filled in by someone reading them, who would be able to refer to the instructions.

Individual questions have been filled in by the enumerators on a much higher proportion of forms than 3%; just how high the proportion was we cannot say, because the entries by the enumerator can only be distinguished by examining the handwriting, and this was far too difficult to do for our whole sample. We merely did this when we found errors. There does however seem to be a very good case for the enumerators to be required to use ink of distinctive colour when making any alterations or additions to the forms.

American experience rather suggests that the enumerators will at best make poor interviewers.* Up until 1950, with minor exceptions, the American census information was collected by an enumerator reading the census questions to one respondent in each household, and recording the replies. For the 1960 Census, the Bureau of the Census abandoned almost completely using their enumerators as interviewers, and instead turned to formfilling by the householders themselves. They found that they obtained better data on many of the census items, thus providing an answer to those critics of the British approach who in the nineteen-fifties used to urge the adoption by Britain of the American practice.

Another suggestion has been made that the census should use fully trained experienced interviewers, but this is ruled out by the numbers required. The Social Survey has only some 400 trained interviewers available for all its work; and, taking all other sources together, it is doubtful whether there are many more than 4,000 interviewers in this country who are trained in survey interviewing methods. This compares with the 100,000 or more enumerators to be used in 1971, a number which would have to be considerably increased if interviewing were adopted. Trained, experienced, interviewers are a scarce resource which we feel should be used for relatively small sample surveys of some depth where their interviewing skills are employed to the full.

Because of the lack of contact between enumerators and households under the present arrangements, and because of the inability of enumerators to interview correctly even when contact is made, the census must limit itself to asking questions which can be satisfactorily answered by the vast majority of householders. This places a severe limitation on the sort of questions that can be asked.

*J. Waksberg and L. Pritzker "Changes in Census Methods" *Journal of the American Statistical Association*, December 1969.

6.4 The value of previous census experience

The evidence we have suggests that enumerators with previous census experience did not carry out their task any better than those for whom this was their first census. As we have seen (page 35) there were 60 cases where a group of people had been wrongly treated as a household when the group really consisted of more than one household. These errors can be laid squarely at the door of the enumerators, since their task was to secure a separate H form from each household. Just half (30) of these cases were contributed by enumerators with no previous census experience, while the other half were contributed by those who had worked on an earlier census. The division of this important group of errors corresponds almost exactly with the division of enumerators by experience: 51% of enumerators had had no previous census experience. Thus, although we cannot be sure that the 2 groups of enumerators faced the same difficulties, the results do suggest that in this vital area the group with previous experience performed no better than those without previous experience.

PART VII CONCLUSIONS

7.1 Some lessons from the 1966 Census

That the 1966 Census seems to have undeservedly acquired a bad reputation as being more inaccurate than other recent censuses is, we feel, mainly due to the fact that it was based on a sample of the population. Although we have doubts about the adequacy of the coverage check made on the sampling frame, we think that on the whole the sampling of the non-institutional population worked quite well in the field, thanks mainly to the 1964 Pretest of this part of the operation. The only part of the field sampling which went badly wrong was the fine sampling of the inmates of institutions such as hospitals.

In an attempt to summarize the effects of errors on the accuracy of census topics, we have brought together in one table the misclassification rates for those topics which we checked in our post-enumeration survey, together with a list of those items for which the correction factor fell outside the range 1.00 ± 0.05 . For further details readers should refer to the appropriate sections in Part III and Part IV. Among other things, Table 7.1 shows that, apart from 'cars and vans', every census topic has at least one item which required a correction factor outside the stated range.

TABLE 7.1
A summary of misclassification rates and correction factors
for the census topics covered by the Quality Check

Topic	Misclassification rate* %	Items with a correction factor outside the range 0.95 to 1.05
<i>De facto</i> household size	0.5	One, six, nine, ten or more
<i>De jure</i> household size	1.4	One, six, nine, ten or more
Rooms (1966 definition)	16.7	Most numbers
Rooms (1961 definition)	22.6	Most numbers
Tenure	2.5	Furnished, other tenures
Hot water	3.3	Shared use, none
Flush toilets	4.3	Shared use, none
Baths and showers	1.2	Shared use
Cars and vans	1.9	.....
Garaging	5.8	Not in garage (other than on road)
Main economic position	2.2	{ Job during week, not Monday
Full and part-time	1.7	{ Job during year, not week
Second occupation	3.6	Part-time
Method of transport to work	6.8	As employee, self-employed
Qualified manpower	1.1	Train, tube, none With qualifications

*This rate, unlike the correction factor, makes no allowance for fundamental errors arising because of the wrong treatment of households.

The success story of the 1966 Census was the substitution of date of birth for age as a census question. This change was a direct result of the 1961 post-enumeration study which had suggested that such a change would bring

about an improvement in accuracy of the age data. This proved to be the case.

On the other hand one of the most serious sources of error, but one which has undoubtedly affected previous censuses to an even greater extent, was the failure to divide groups of people correctly into their household units, with the result that 2 or more households were sometimes treated as one. This not only affects the estimate of the number of households but seriously affects many of the items where the household is the basic unit, i.e. rooms, tenure, hot water, toilets, and baths. Estimates of the numbers of households sharing the various amenities are particularly affected. Since the accuracy with which people are divided into households depends on the inquiries made by the enumerators, who in too high a proportion of cases do not in fact succeed in speaking to anyone in the household, this problem is going to prove rather intractable. There are similar difficulties with the concept of a structurally separate dwelling, which in multi-occupied buildings really requires an inspection of the internal arrangements of the whole building. Three of the census questions produced very inaccurate responses. These were Question 17 (Did the person do any other work for payment or profit during the week ended 23rd April 1966 . . . ?), Question 18 (Did the person have a job on Monday 18th April 1966?) and the question on showers (part (i) of Question 26). Their results are of little practical use and they also used up valuable space on the census form. All these three questions were included in the census for the first time in 1966 but without pre-testing. Introducing new questions in this way is an expensive and risky process. The risk is that a bad question can prejudice the way others are answered. The results of these three questions demonstrate that an adequate pretest is essential on all new questions at the very least. But even that hasty decennial, rooms, has a serious volume of error, only a small part of which is due to trouble with the household definition. The results for rooms demonstrate quite clearly that large numbers of formfillers do not read the instructions given in the notes, even when such notes are printed with the question; however, this may have been aggravated by the very small print used for such notes, since it is popularly said that people never read the small print on forms. Certainly there are numerous examples to show that the notes in the separate leaflet, although in larger print, are not read. Thus questions which require the formfiller to read lengthy notes have little chance of success. Although we have no proof of this, notes printed with the question must, we think, stand a better chance of being read.

Too much has come to be expected from the census which is designed to produce population statistics and simple information for local areas but which is in fact a relatively blunt instrument as far as data collection and problem solving are concerned. The attempt to reconcile the Ministry of Labour and the census estimates of the labour force was an example of trying to get too much accuracy out of the census; such a reconciliation really requires a more sophisticated approach. All the evidence points to the exclusion from the census of all but the relatively simple questions. The inclusion of over-complicated questions in the Census is due partly to the absence of pretests. Another factor is turnover in staff in professional posts which GRO suffers in common with the rest of the Civil Service. The reposting of staff after the 1961 Census meant that the 1966 Census was handled by statisticians who were unfamiliar with its problems and further reposting meant that the same

situation existed for the 1971 Census. A greater continuity of staff could benefit future Censuses as much as it would have done the 1966 Census.

Some blame for overcomplicated questions must also be attached to the statistical departments through whom departmental requests for questions on the Census are channelled. They fail to appreciate the limits of what can be undertaken in a national form filling exercise by ordinary householders. If members of these departments were to observe enumerators engaged in the delivery and collection of Census forms in the more overcrowded areas of some of our cities this would be brought home to them. Perhaps the greatest gain from the first pretest in preparation for 1971 has been that considerable numbers of the GRO planning staff did just this, and thus have a much better appreciation than before of the problems involved.

7.2 Developments since 1966

The need for pretests was readily accepted by GRO and 2 major tests were planned in preparation for the 1971 Census, one in April 1968 and the other in April 1969. We felt that the first priority was to test some form of booklet in 1968, since the single sheet schedule as used in 1966 had reached the maximum size possible, thus limiting the questions which could be included, producing a cramped layout with very small print, and making it necessary to give the instructions relating to many of the questions in a separate leaflet. This plan was acceptable to the GRO but pressures to test other things changed the aims of the 1968 Pretest, which in fact used a single sheet schedule similar to that used in 1966. Eventually a form of booklet was tested in 1969 but it did not prove successful; and because of the long period of time required for the parliamentary and printing stages, there was no longer time to try another version. Indeed there was scarcely time to absorb the lessons of the 1969 Pretest. So the 1971 Census will, as Benjamin has noted,* use an untested form of booklet. Other major changes that were introduced without pretesting include the relegation of absences to the back page and the rearrangement of the question order to facilitate producing earlier analyses of some of the data. This attempt to produce earlier tables, while commendable for its own sake, has burdened the already overloaded enumerators with the preparation of computer input sheets, and has produced a question order which may well confuse the formfillers; for example, the first of the economic activity questions has been separated from the rest of that block of questions.

If unwarranted risks are to be avoided and the maximum gain is to be obtained from large scale pretests then a better strategy must in future be adopted.

7.3 The future of the census

In considering ways of improving the census in the future one is hampered by lack of knowledge as to how the results are used. Because of the limitations both on the type of questions that will be answered with sufficient accuracy and on the number of questions on any one topic which can be accommodated

*B. Benjamin "The 1971 Population Census and after" *Journal of the Royal Statistical Society*, Volume 133, Part 2, 1970.

in such a multi-purpose inquiry, we were doubtful about the real help in making decisions that could be provided by some of the questions.

Even without the knowledge of the uses of the census we would suggest that there are ways of supplementing the information it provides which should be explored. At the national level, for example, could more useful information for planning in the housing field be obtained from the continuing study of a master sample of purpose-built flats and other buildings based on the valuation system? In this way one could really find out what was happening in the furnished sector.

Again, has the electoral registration system really been used to the best advantage in making estimates of population changes between censuses? If the registration were changed to cover everyone with their date of birth it would add little to the form-filler's task but the population estimates for local authority areas would be much improved. (The dates of birth need not of course be published).

7.4 A review of our approach to the Quality Check

Finally, and with the advantage of hindsight, we look back at our Quality Check and see no reason for any basic change in our approach, although the individual questions that we asked in our interviews could sometimes be improved and expanded. We do not believe we have measured the full extent of all the errors, but the errors we have counted are well established, and in most cases we know just how they occurred.

Our biggest regret is that, for the five-year migration question, we did not ask more questions about previous addresses and the circumstances of moves, in order to understand better the causes of error. Where, as in this case, one had such a first class check on accuracy, one should devote more effort to finding out the reasons for the errors.

Finally, in a check of this kind the aim should be quality; but since this requires a great deal of painstaking effort and eats up a great deal of skilled time, the sample must be kept as small as possible. Those who expect a quality check sample large enough to produce separate regional correction factors are being quite unrealistic.

Any future check should, if at all possible, incorporate a properly designed coverage check, with an attempt to follow through the effects of the non-coverage on the individual items of information; we regard such a coverage check as being by far the most difficult part of a quality check.

APPENDIX

Method used in making Quality Check estimates

The method by which we have calculated our corrected estimates for the published census figures is essentially one involving post-survey stratification by the census classification. The details of the calculations are explained in the following table and in the accompanying notes. They deal with the more complex type of household-based table* to be found in Part III. The only unusual feature of the estimation procedure is the derivation in (ii) of Q_1 and Q_2 as the totals for the sixth and seventh columns. The ratio estimation used there seems appropriate, as the households in column 6 are derived from those in row 6, while the addresses involved in column 7 and row 7 are in many cases the same. Readers should note that this method of estimation will produce slightly different figures for the total number of households on the different tables† of Part III. Stages (ii) and (iii) are not involved in the simpler tables of Part IV.

Where sampling errors have been calculated they have been made for the simple ratio estimates

$$\frac{q_{AA} + q_{AB} + q_{AC} + q_{AD} + q_{A1} + q_{A2}}{q_A} \times C_A$$

in order to simplify the calculations. Calculated in this way, the sampling errors will tend to be slight over-estimates in that they ignore any post-survey stratification gain in accuracy.

*Readers having difficulty with the layout of these tables should refer to the description of Table 3.1 on pages 34 and 36.

†But note that Table 3.2 has a different total because it is based on usual residences rather than *de facto* households.

Calculation of population estimates, based on Quality Check results

		1966 CENSUS CLASSIFICATION				SOMETHING	Value added resulting from applying a census check	Value wrongly estimated from the census	Population estimates based on Quality Check
QUALITY CHECK	CLASSIFI- CATION	A	a	c	d				
	B	Q _{AA}	Q _{aa}	Q _{Ac}	Q _{ad}		Q _{A1}	Q _{A2}	Q _A
	C	Q _{BA}	Q _{ba}	Q _{bc}	Q _{bd}		Q _{B1}	Q _{B2}	Q _B
	D	Q _{CA}	Q _{ca}	Q _{cc}	Q _{cd}		Q _{C1}	Q _{C2}	Q _C
	NON- APPLIC.	Q _{DA}	Q _{da}	Q _{dc}	Q _{dd}		Q _{D1}	Q _{D2}	Q _D
Census used & used recently containing more than one user		Q _{1A}	Q _{1B}	Q _{1C}	Q _{1D}				
Value wrongly estimated in the non-per-cent		Q _{2A}	Q _{2B}	Q _{2C}	Q _{2D}				
GRAND TOTAL		Q _A	Q _B	Q _C	Q _D				
Published census population figures		C _A	C _B	C _C	C _D				

C = Published census figure

Q = Quality Check sample figure

Q̄ = Quality Check estimate

(ii) Estimates for the elements in column A are formed as follows:

$$Q_{AA} = \frac{C_A}{Q_{1A}} \times Q_{1A}, \quad Q_{BA} = \frac{C_B}{Q_{1B}} \times Q_{1B}, \dots, \quad Q_{DA} = \frac{C_D}{Q_{1D}} \times Q_{1D},$$

and similarly for columns B, C and D.

(iii) The totals for the sixth and seventh columns are then derived, as follows:

$$Q_1 = \frac{Q_1}{\sum_A Q_{1A}} \times \sum_A Q_{1A} \quad \text{and} \quad Q_2 = \frac{Q_2}{\sum_A Q_{1A}} \times \sum_A Q_{1A}$$

(iv) The elements of the eighth column are then estimated:

$$Q_{A1} = \frac{Q_1}{Q_1} \times Q_{1A}, \dots, \quad Q_{D1} = \frac{Q_1}{Q_1} \times Q_{1D}$$

and similarly for the seventh column.

(v) The final estimates are obtained by adding across the first four rows:

(vi) The estimated correction factors are then:

$$\frac{Q_A}{C_A}, \dots, \frac{Q_D}{C_D}$$



EXAMPLE OF A COMPLETED FORM

www.browntrout.com

Engineering											
Surveying											
Geology											
1	James Cox	Celie, Son	Robert Cox	Augustus Cox	Benard Cox	John Russell					
2	Hend	Hedge	Ton	Engelton	Bender	Walter					
3	Bennet	Present	Present	Present	Present	Present					
4	Hess	Hess	Hess	Hess	Hess	Hess	21. One Lane, Hill.				
5	Sant	Same	Same	Under one hundred	Same	Same	22. George Road, Lansdale				
6	15. Downing street	19. Downing Street, Glasgow	Under fine	Under fine	Same	Same	23. Bridge Road, Sydney				
7	M. 1/4	M. 1/4	M. 1/4	M. 1/4	M. 1/4	M. 1/4	24. Mainland				
8	Present	Present	Present	Present	Present	Present	25. Mainland				
9	Kingsbury	Lodden	Hess	Hess	Hess	Hess	26. Angle				
10	Yea	Yea	No	No	No	No	27. Angle				
11	Yea	Yea	Yea	Yea	Yea	Yea	28. Angle				
12	1. Coxon, and Co. Office, Manchester Manufacturing Establishment	2. Coxon, and Co. Office, Manchester Manufacturing Establishment	3. Coxon, and Co. Office, Manchester Manufacturing Establishment	4. Coxon, and Co. Office, Manchester Manufacturing Establishment	5. Coxon, and Co. Office, Manchester Manufacturing Establishment	6. Coxon, and Co. Office, Manchester Manufacturing Establishment	7. Coxon, and Co. Office, Manchester Manufacturing Establishment	8. Coxon, and Co. Office, Manchester Manufacturing Establishment	9. Coxon, and Co. Office, Manchester Manufacturing Establishment	10. Coxon, and Co. Office, Manchester Manufacturing Establishment	11. Coxon, and Co. Office, Manchester Manufacturing Establishment
13	Yea	Yea	Yea	Yea	Yea	Yea	12. Coxon, and Co. Office, Manchester Manufacturing Establishment				
14	Yea	Yea	Yea	Yea	Yea	Yea	13. Coxon, and Co. Office, Manchester Manufacturing Establishment				
15	Present	Present	Present	Present	Present	Present	14. Coxon, and Co. Office, Manchester Manufacturing Establishment				
16	Yea	Yea	Yea	Yea	Yea	Yea	15. Coxon, and Co. Office, Manchester Manufacturing Establishment				
17	Yea	Yea	Yea	Yea	Yea	Yea	16. Coxon, and Co. Office, Manchester Manufacturing Establishment				
18	Yea	Yea	Yea	Yea	Yea	Yea	17. Coxon, and Co. Office, Manchester Manufacturing Establishment				
19	Present	Present	Present	Present	Present	Present	18. Coxon, and Co. Office, Manchester Manufacturing Establishment				
20	Yea	Yea	Yea	Yea	Yea	Yea	19. Coxon, and Co. Office, Manchester Manufacturing Establishment				
21	Yea	Yea	Yea	Yea	Yea	Yea	20. Coxon, and Co. Office, Manchester Manufacturing Establishment				
22	Yea	Yea	Yea	Yea	Yea	Yea	21. Coxon, and Co. Office, Manchester Manufacturing Establishment				
23	S.R.M. (Surveyor)						22. S.R.M. (Surveyor)				
1	James Cox	Celie, Son	Robert Cox	Augustus Cox	Benard Cox	John Russell					
2	Hend	Hedge	Ton	Engelton	Bender	Walter					
3	Bennet	Present	Present	Present	Present	Present					
4	Hess	Hess	Hess	Hess	Hess	Hess	21. One Lane, Hill.				
5	Sant	Same	Same	Under one hundred	Same	Same	22. George Road, Lansdale				
6	15. Downing street	19. Downing Street, Glasgow	Under fine	Under fine	Same	Same	23. Bridge Road, Sydney				
7	M. 1/4	M. 1/4	M. 1/4	M. 1/4	M. 1/4	M. 1/4	24. Mainland				
8	Present	Present	Present	Present	Present	Present	25. Mainland				
9	Kingsbury	Lodden	Hess	Hess	Hess	Hess	26. Angle				
10	Yea	Yea	No	No	No	No	27. Angle				
11	Yea	Yea	Yea	Yea	Yea	Yea	28. Angle				
12	1. Coxon, and Co. Office, Manchester Manufacturing Establishment	2. Coxon, and Co. Office, Manchester Manufacturing Establishment	3. Coxon, and Co. Office, Manchester Manufacturing Establishment	4. Coxon, and Co. Office, Manchester Manufacturing Establishment	5. Coxon, and Co. Office, Manchester Manufacturing Establishment	6. Coxon, and Co. Office, Manchester Manufacturing Establishment	7. Coxon, and Co. Office, Manchester Manufacturing Establishment	8. Coxon, and Co. Office, Manchester Manufacturing Establishment	9. Coxon, and Co. Office, Manchester Manufacturing Establishment	10. Coxon, and Co. Office, Manchester Manufacturing Establishment	11. Coxon, and Co. Office, Manchester Manufacturing Establishment
13	Yea	Yea	Yea	Yea	Yea	Yea	12. Coxon, and Co. Office, Manchester Manufacturing Establishment				
14	Yea	Yea	Yea	Yea	Yea	Yea	13. Coxon, and Co. Office, Manchester Manufacturing Establishment				
15	Present	Present	Present	Present	Present	Present	14. Coxon, and Co. Office, Manchester Manufacturing Establishment				
16	Yea	Yea	Yea	Yea	Yea	Yea	15. Coxon, and Co. Office, Manchester Manufacturing Establishment				
17	Yea	Yea	Yea	Yea	Yea	Yea	16. Coxon, and Co. Office, Manchester Manufacturing Establishment				
18	Yea	Yea	Yea	Yea	Yea	Yea	17. Coxon, and Co. Office, Manchester Manufacturing Establishment				
19	Present	Present	Present	Present	Present	Present	18. Coxon, and Co. Office, Manchester Manufacturing Establishment				
20	Yea	Yea	Yea	Yea	Yea	Yea	19. Coxon, and Co. Office, Manchester Manufacturing Establishment				
21	Yea	Yea	Yea	Yea	Yea	Yea	20. Coxon, and Co. Office, Manchester Manufacturing Establishment				
22	Yea	Yea	Yea	Yea	Yea	Yea	21. Coxon, and Co. Office, Manchester Manufacturing Establishment				
23	S.R.M. (Surveyor)						22. S.R.M. (Surveyor)				

EXAMPLE OF A COMPLETED FORM

FOR INFORMATION USE			
Order No.	Alt. No.	Spec. No.	Serial No.
<u>1</u>			
Name of person receiving message			
<u>Jessie Rose Estelle</u>			
Address			
<u>Massachusetts Ave., Boston, Mass.</u>			
At or near telephone			
<u>Specific time when message taken</u>			
Specific time when message sent			



CENSUS
ENGLAND & WALES, 1966

二

I form or P form

If you have been issued with an I form or a P form, this example will be helpful to you but questions 3 and 24 to 27 will not apply in your case.

Form or p form

If you have been issued with an I form or a P form, this example will be helpful to you but questions 3 and 24 to 27 will not apply in your case.

Deliveries to us made by the last of December 1944 will be
permitted making you inform us.

CENSUS, ENGLAND AND WALES, 1966

NOTES FOR FORM H

Persons to be included

- (i) Everyone who usually lives in the household must be included on the census form whether they are present or absent on Census night, 24/25th April.
- (ii) Visitors spending Census night in the household should be included, also those who arrive on Monday morning (25th April) having spent Census night travelling.
- (iii) Do not include any absent family member who usually lives at another address (for example, a son who has left home and is living in lodgings or a person living permanently in an institution such as an old people's home or who has lived there for the past six months).

Question 3—Present or Absent on Census Night

- (i) Write 'Present' for all people who spend Census night here. Members of the household who are out on night work should also be marked 'Present'. So should anyone who arrives before midday on Monday having spent Census night travelling.
- (ii) Write 'Absent' only for household members who are spending Census night away from home (other than on night work). For example, write 'Absent' for a schoolboy who lives at home during the holidays but is now away at boarding school or for anyone temporarily away on his job, on holiday or in hospital (including a new-born baby).
- (iii) For people marked 'Absent' write also the full postal address of the place where they are staying on Census night. If the precise address is not known write the name of the town or village where the person is staying. For anyone temporarily absent abroad write the name of the country.

Question 4—Usual Address

- (i) For school children, students, etc., who live away from home during term, give the home address and not the term time address.
- (ii) (1) For members of H.M. Forces who live in married quarters give the address of the married quarters.
(2) For members of H.M. Forces who do not live in married quarters—if they live on the station give the address of the station; if they 'live out' give the living out address.
- (iii) For people present on Census night who live away from home during the week give the address from which they usually go to work, but if the head of the household lives away from home during the week write 'Here' for the usual address.
- (iv) For people with no settled address write 'None'.
- (v) For boarders who have a settled address with this household write 'Here'.

Question 9—Birthplace

If the mother's usual residence at the time of a person's birth is not known, give the name and address of the hospital, nursing home or actual place of birth. If born at sea write 'At sea'.

Question 10—Employment

A job means any work for payment or profit including service in H.M. Forces. In particular it includes—

- (i) Work on a person's own account.
- (ii) Part-time work, even if only for a few hours, such as jobbing, gardening or paid domestic work.
- (iii) Casual or temporary work of any kind (for example seasonal work, week-end work and vacation work by students).
- (iv) Unpaid work in a family business including a shop or farm.

Unpaid work, other than in a family business, does not count as a job.

Question 11—With a job last week

As well as people who attended work for pay or profit in the week before the census, the following people also count as having "had a job" during the week ended 23rd April, 1966.

- (i) People away from work on holiday if their job is waiting for them on their return.
- (ii) People away from work because of illness or injury if their job is waiting for them on their return.
- (iii) People away from work because of a strike or other industrial dispute.
- (iv) People temporarily laid off work by their employers for that week.

Question 12—Employer and Employer's Business

- (i) Describe the nature of the employer's business fully, avoiding abbreviations or initials. General terms such as 'Manufacturers', 'Merchants', 'Agents', 'Brokers', 'Dealers', 'Engineering' are not enough by themselves and further details should be given about the articles manufactured or dealt in.
- (ii) 'Self-employed, employs others' means having one or more employees who are not family workers. (A family worker is one who lives in the same household as the employer and is related to him.)
- (iii) For civil servants, local government officers and other public officials give the name of the Government Department or Local Authority and the branch in which they are employed.
- (iv) For people employed solely in private domestic service there is no need to give the names of individual employers during the week; it is enough to write 'Private' in answer to this question.
- (v) For people who changed their job during the week give details of the job held at the end of the week.

Question 13(a)—Occupation

- (i) Full and precise details of occupation are required. If a person's job is known in the trade or industry by a special name, use that name. Terms such as 'Scientist', 'Technician', 'Engineer', 'Machinist', 'Fitter', 'Foreman', 'Checker', should not be used by themselves. Greater details should be given as, for example, 'Wood-working Machinist', 'Civil Engineer', 'Tool room Foreman', etc.
- (ii) For civil servants, local government officers and other public officials, give their rank or grade.

Question 13(b)—Apprentices, Trainees

This part of the question should be answered for anyone undergoing training for a period fixed in advance and leading to recognition as a skilled worker or technician and/or to a recognized technical, commercial or professional qualification or managerial post. It should not be answered for a young person undergoing probationary training who has not yet entered into formal apprenticeship.

Question 14—Full-time/Part-time

- 14(a) Write 'Yes' if employment is normally full-time but was interrupted during the week (for example by sickness, injury, holidays, short-time workings, strikes or unfavourable weather) or was started or stopped part way through the week.
- 14(b) For part-time workers not at work during that particular week write 'None'.

Question 15—Place of Work

- (i) For people with no regular place of work such as sales representatives, transport inspectors, certain building workers and others who do not work daily at or from a fixed address or depot, write 'No fixed place'.
- (ii) For people working daily at or from fixed address or depot, such as certain transport workers, and building workers employed on a site for a long period, give the address of the depot, site or other fixed address.
- (iii) For dock workers registered under the National Dock Labour Scheme who are in possession of a Pay Voucher Book issued by the National Dock Labour Board, give the address of the call stand or control point where they are required to prove attendance. For registered dock workers not issued with a Pay Voucher Book by the Board and other dock workers, give the name and address of the dock or wharf at which they are usually employed.
- (iv) For seamen give the name of the ship and, if it is in the United Kingdom, the port in which it is lying, otherwise give the name of the home port.

Question 16—Transport to Work

- (i) For people using more than one method of transport to work give only the method by which the longest distance is travelled (for example if the normal journey to work is one mile by bus and five miles by train, write 'Train').
- (ii) For people whose main method of transport to work is by bus, write either 'Public service bus' or 'Private bus' whichever is appropriate.
- (iii) For people whose main method of transport to work is by motor cycle combination write 'Motor cycle combination' and not 'Motor cycle'.
- (iv) For people who work at home write 'None'.
- (v) For people with no fixed place of work give the method of transport most often used for going to work.

Question 17—Other Jobs

- 17(a) Write 'Yes' for people who had any other job or jobs in addition to that described in questions 12 and 13. Any additional part-time or casual work counts as another job whether it was on the person's own account or as an employee.

Question 18—With a Job on Monday 18th April

Answer 'Yes' to this question for anyone with a job on Monday but away from work for any reason. See note to Question 11 also.

Answer 'No' to this question for anyone without a job on Monday 18th April even if they had a job at some other time during the week ended 23rd April.

Question 19—People without a Job on Monday 18th April

For anyone without a job on Monday 18th April write 'Yes' to at least one of the sections (a), (b), (c), (d) or (e), or give details at 19(f).

Question 20—see Notes to Question 12

Question 21—see Notes to Question 13

} For people waiting to take up their first employment write 'None'.

Question 22—Students

- (i) 'Student' means full-time student but it does not include a person on day release from work to attend school or college or a person with a job who attends night school.
- (ii) 'Educational establishment' means a school, university, training college or any other establishment giving full-time education except one provided by employers for the training of their own workers (for example an apprenticeship school).
- (iii) 'Next term' means the summer term starting in April or May 1966.

Question 23—Higher Education Qualifications

- (i) Exclude all qualifications normally obtained at school such as
General Certificates of Education (G.C.E.)—all levels.
School Certificate and Higher School Certificate
Matriculation
Scottish Certificate of Education (S.C.E.)
Scottish Leaving Certificate (S.L.C.)
Higher Leaving Certificate (H.L.C.)

and any other qualifications equivalent to or lower than any of these such as

Ordinary National Certificate (O.N.C.)
Ordinary National Diploma (O.N.D.)

- (ii) Enter at II all appropriate qualifications in the order in which they were obtained together with the major subject or group of subjects. Use recognized abbreviations where appropriate, for example:

H.N.C. (Building)	Ph.D.	(History)
S.R.N. (Nursing)	M.A.	(General)
B.A. (French and German)	Dip. Tech.	(Chemical Engineering)
B.Sc. (Zoology)	A.M.I.C.E.	(Civil Engineering)

otherwise write the name of the qualification in full, as, for example:

Teaching Certificate (Physical Education)
Law Society's Qualifying Examination (Part I)

Instructions for Census Enumerators

CENSUS · ENGLAND AND WALES · 1966

CONTENTS.

		Pages
Chapter I	Introduction	3—5
Chapter II	Basic Information	6—17
Chapter III	The enumeration record	18—25
Chapter IV	Tour of district and delivery of leaflets	26—27
Chapter V	Delivery of forms	28—39
Chapter VI	Collection of forms	40—43
Chapter VII	Duties after enumeration	44—45
Appendix A	Reasons for the census and notes on some questions you may be asked	47—50
Appendix B	Enumerating a caravan site	51—53
Appendix C	Check list	54—55

CENSUS CALENDAR

2 April	Saturday	
to 7 April	to Thursday	}
12 April	Tuesday	
to 21 April	to Thursday	}
24 April	Sunday	Census day
25 April	Monday	
to 28 April	to Thursday	}
9 May	Monday	Hand over completed material to census officer on or before this date.



CHAPTER I

Introduction

1 General

You will be taking part in the first census of this country based entirely on a sample of the population. The success of the whole operation depends largely on you and the skill and thoroughness which you bring to the job of enumeration.

The sample will cover one person in every ten in the population and to ensure that it will provide a representative picture of the country as a whole, the procedures set out in this book must be strictly followed. The information which is being obtained will be used, in the form of statistics, by central and local government for planning the country's social and economic needs. But if the sample is faulty the census results will lose much of their value.

You must acquire a thorough knowledge of these instructions so that you know exactly what you have to do. Don't be dismayed by the length of this book. Most of the job will be quite straightforward and many of the instructions deal with special or exceptional cases. If there is anything which you do not understand, ask your census officer.

The ready co-operation of the public is essential and you will be able to contribute by being helpful, considerate and discreet in your dealings with them.

The information about the census given in Appendix 'A' is designed to help you deal with enquiries from the public.

2 Summary of duties

You will be issued with an enumeration record book (in certain circumstances you may be given more than one book) containing a list of sample addresses (Chapter II). Your duties will then be—

- (i) two to three weeks before Census day, to deliver explanatory leaflets to the sample addresses (Chapter IV);
- (ii) during the period 12th to 21st April, to deliver census forms to the people at those addresses (Chapter V);
- (iii) immediately after Census day, to collect all the forms you have issued and make sure that all the appropriate people have been enumerated (Chapter VI);
- (iv) when collection is complete, to put the material in order and hand it over to your census officer (Chapter VII); and
- (v) during the various stages of the operation, to keep a detailed record in your enumeration record book (Chapter III and later) and make progress reports to your census officer.

3 Credentials

You will be issued with an appointment card (E.3) showing your name and signed by your census officer. This card must be shown on demand to any person who asks for evidence of your identity and authority. You may find it helpful to use the card to introduce yourself to members of the public.

4 Secrecy

The public have been promised that the information which they give for census purposes will remain confidential and be used only for statistical purposes. There must be no breach of confidence. You have already given an undertaking that you will not use or pass on to any other person, except in the course of your duties, any information which you obtain as an enumerator. This applies not only to the details entered on the census forms themselves but also to any information given in reply to your enquiries. There are penalties for improper disclosure of information.

5 Training

After you have had an opportunity to study this book you will be called to training sessions by your census officer. The training has been designed to help you understand and apply these instructions and it will include some practical work.

You should take advantage of these periods of training to raise with your census officer any points in the instructions which you do not understand, or any difficulties which you think may arise in your district.

6 Illness

If you become ill or incapacitated in any way during your term of office let your census officer know as soon as possible so that he can arrange for someone else to take over your duties.

7 Difficulties during the enumeration

If you meet any problems which are not covered by these instructions, ask your census officer for advice.



CHAPTER II

Basic Information

8 This chapter deals with the basic information needed for your job. Study it thoroughly so that you are quite certain what is meant by the terms 'building', 'household', 'rooms', 'dwelling', 'institutional premises' and 'sample address'.

9 Building

In the context of the census the term 'building' has a specialised meaning. A building will be any one of the following:

- house (detached, semi-detached or terraced);
- bungalow (detached, semi-detached or terraced);
- non-residential premises which may have living accommodation associated with them (for example, a shop with a flat above or an office block with a caretaker's flat);
- block of flats or maisonettes;
- chalet or shack;
- caravan.

10 Household

The definition of a household for census purposes is:

- (a) any group of persons, whether related or not, who live together and benefit from a common house-keeping; or
- (b) any person living alone who is responsible for providing his or her own meals."

A household will usually consist of the normal family living and eating together, but household and family are not necessarily one and the same as the following examples show:

SITUATION	NUMBER OF HOUSEHOLDS
A Mr. and Mrs. Jones live in the same house as Mrs. Jones' parents.	One household if both families share a common house-keeping BUT Two households if each family caters for itself.
B Miss Smith has a bed sitting room in a house occupied by Mr. and Mrs. White	One household if Miss Smith usually has at least one meal per day (breakfast counts as a meal) with the White family BUT Two households if Miss Smith is responsible for all her own catering.

11 Rooms

- (a) For a private household, all living rooms, bedrooms and kitchens count, whether or not at present in use. A scullery counts as a room only if it is used for cooking. A bathroom, toilet, closet, landing, lobby or recess is excluded, so is a scullery which is not used for cooking, and also any store-room, office, shop or other room used solely for business purposes. Prefabricated extensions will count as rooms if regularly used for living, eating, sleeping or cooking. A large room which can be divided by a sliding or folding fixed partition counts as two rooms, but if divided by curtains or portable screens counts as one room.
- (b) For a hotel, boarding house, holiday camp or similar establishment, all the rooms used for living, eating or sleeping by either guests or staff count. Public lounges, dining rooms, private sitting rooms, staff dining and common rooms, bedrooms for staff and for guests are included but store rooms, offices, kitchens, bathrooms, closets etc. are excluded. Any rooms occupied by a separate household (for example the manager's family) must be credited to the household and not to the hotel etc.
- (c) Information about rooms is not required for any other type of establishment.

12 Dwelling

For a unit of living accommodation to count as a dwelling for census purposes it must satisfy certain specific requirements. Unless a clear and precise standard is imposed no one will know what the census housing statistics really mean.

The broad basis of the census standard is that for accommodation to count as a dwelling it must give the occupants roughly the same degree of privacy that is available in an ordinary unconverted house or in a flat in a purpose-built block; the accommodation must be structurally separate behind its own front door and the occupants must be able to get in and out without passing through anyone else's living quarters. So-called flats in large houses are not always dwellings from the census point of view. The following paragraphs show you how to determine whether or not accommodation counts as a dwelling.

The most usual situation is quite straightforward and is one of the following:

- (i) The normal house (detached, semi-detached or terraced) which has not been altered in any way for occupation by more than one household.
- (ii) A bungalow (detached or semi-detached).
- (iii) A flat or maisonette in a purpose-built block of flats or maisonettes.
- (iv) A flat which is the only living accommodation in premises otherwise used for non-residential purposes (shop, office etc.).
- (v) A caravan.
- (vi) A chalet.
- (vii) A houseboat.

Each of the above always counts as one dwelling no matter how many households may be living there.

The decision becomes more difficult when a house which was originally built as accommodation for one household has been altered to provide several units of accommodation. The alterations may be slight (the provision of another kitchen, for example); they may be major structural changes resulting in the complete re-designing of the interior lay-out; or they may be something in between.

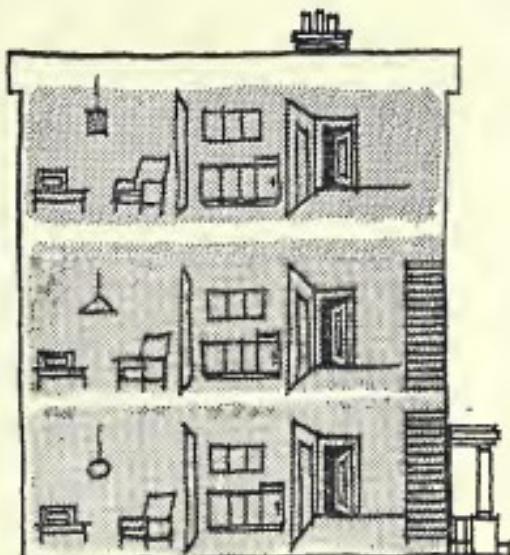
If the alterations amount only to the provision of additional household amenities (bathroom, kitchen, washing-up place etc.), the whole house constitutes one dwelling and the so-called flats within it are merely household spaces in that dwelling.

If the alterations are such that all the flats in the converted building are structurally separate as is the case with flats in a purpose-built block, then each flat counts as a dwelling.

If, however, the conversion has been less thorough and not all of the flats are self-contained behind their own front doors, (a bed-sitting room, sometimes called a one-room flatlet, with shared use of a bathroom does not count as being self-contained) then each flat is merely a household space

and the whole building counts as the dwelling. An exception to this rule occurs when part of the converted building has been permanently separated off from the rest (locked doors or doors blocked by furniture do not count as providing permanent separation) and has its own means of access from outside. In such circumstances the whole building constitutes two dwellings, the separated part being one and the remainder of the building the other.

The following examples illustrate the points made above.



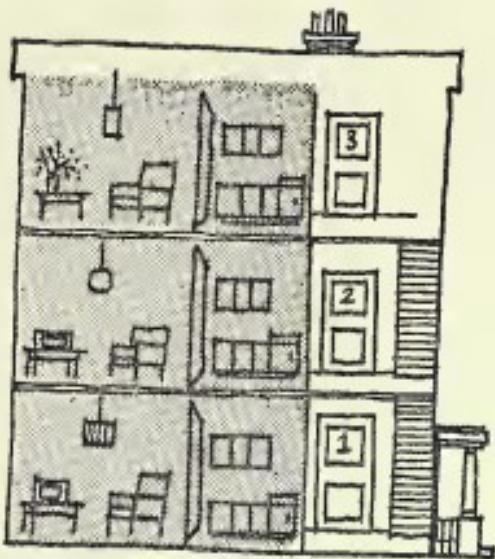
1st Example

SITUATION

Additional kitchens, bathrooms etc., have been installed in a three storey house so that these amenities are available on each floor, but no other structural alterations have been made.

CLASSIFICATION

The whole house is one dwelling.



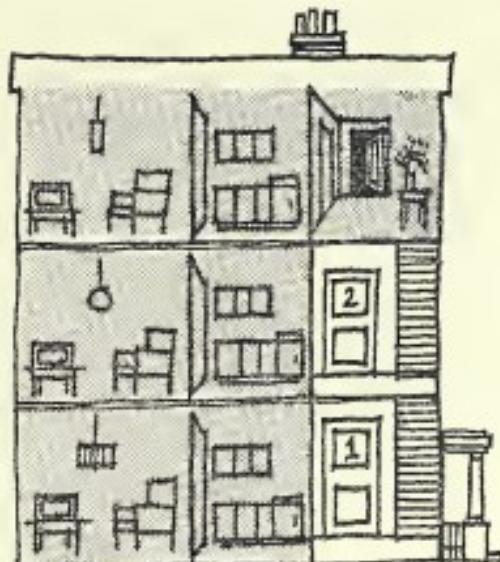
2nd Example

SITUATION

A three storey house has been converted into three flats, one on each floor. In each flat the whole of the accommodation is contained behind one door which opens onto the hall or landing.

CLASSIFICATION

Each of the three flats is a separate dwelling.



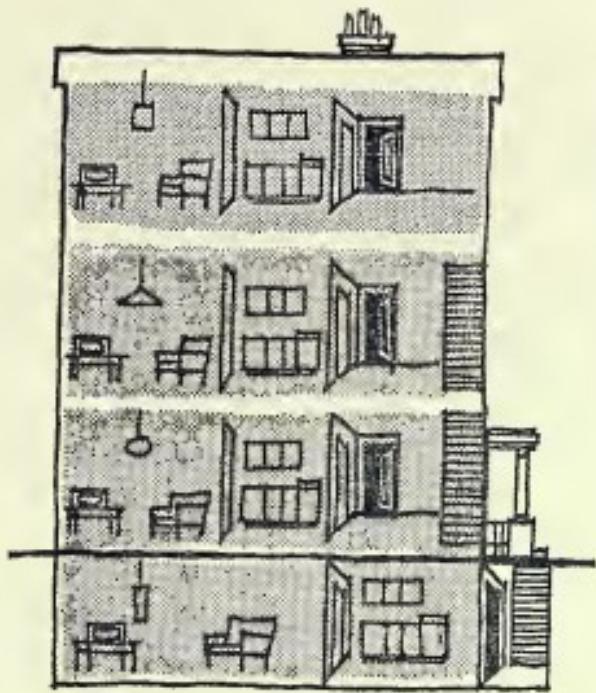
3rd Example

SITUATION

A three storey house has been converted into three flats, one on each floor. In each of the lower two flats the whole of the accommodation is contained behind one door which opens onto the hall or landing. In the flat on the top floor there is no single 'front door' and all the rooms which make up the accommodation open onto the landing, enabling the occupants of the flat to use the landing when passing from one room to another.

CLASSIFICATION

Because of the situation on the top floor, none of the flats in the building can be classified as a dwelling. The whole house counts as one dwelling.



4th Example

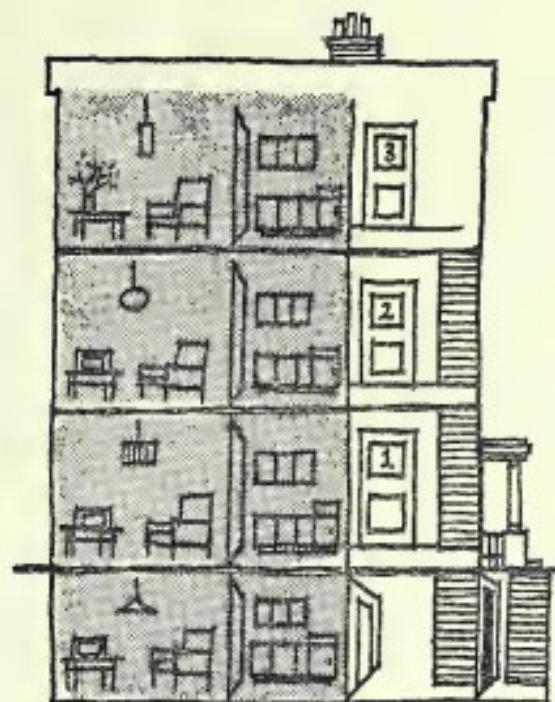
SITUATION

A three storey house with a basement has been converted into four flats. The original access from the basement to the ground floor has been bricked up and access from the basement to the street is provided by the original basement door.

The flats on the other three floors are not self-contained behind their own 'front doors', but each have all their rooms opening onto the hall or landing.

CLASSIFICATION

The basement is a dwelling. But the other three flats do not count as such; they are merely household spaces in that part of the building which is above the basement, and the whole of that part counts as one dwelling.



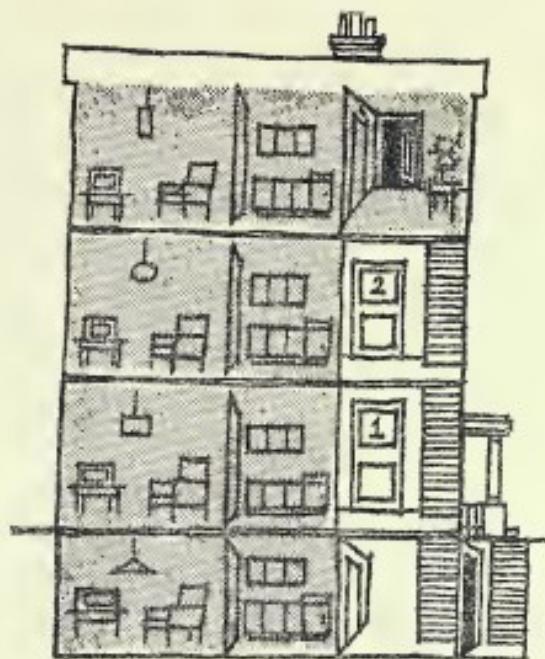
5th Example

SITUATION

A three storey house with a basement has been converted into four flats. The basement has an outside door and a door leading to the hall on the ground floor. The other flats are each self-contained behind a 'front door' which opens onto the hall or landing.

CLASSIFICATION

Each of the four flats (including the basement flat) is a separate dwelling.



But if

SITUATION

The flats on the ground floor and first floor are each self-contained behind their own 'front-door', but the top-floor flat is not self-contained and has all its rooms opening on to the landing,

Then

CLASSIFICATION

The whole building, including the basement, is one dwelling.

13 Institutional premises

This term covers all establishments in which some form of communal catering is provided for the people in them, such as hotels, holiday camps, hospitals, religious communities, boarding schools, prisons, H.M. Forces establishments etc. (Inns and hotels without sleeping accommodation for guests are not institutions but will often contain private households.)

Married quarters in H.M. Forces establishments and dwellings for prison staff do not form part of the institution but in all other circumstances institutional premises comprise all the buildings, including any houses for resident staff, within the boundaries of the establishment. There may be separate private households and separate dwellings within these premises and the rules for identifying them are, in general, the same as in instructions 10 and 12, except that—

- (i) a person or group of people in an institution can count as a separate household only if they are either—
 - (a) a family which does not normally depend on the institution for the provision of meals, or
 - (b) a person or group for whom the institution does not provide any daily meals;and
- (ii) living quarters in an institution count as a separate dwelling, even though accessible only through the institution.

Do not identify separate dwellings in the grounds of an institution if they are occupied by people who do not constitute a private household. For example, a house which is being used as sleeping quarters for nurses counts as part of the hospital not as a separate dwelling.

There are for census purposes two categories of institution—"large" institutions and "smaller" institutions. The division is based mainly on the number of people who were present in these establishments at the 1961 census. The institutions in your district which are classified as "large" are listed in your record book under the heading "Large Institutions". In these establishments one person in every ten will be selected for inclusion in the sample. (In hotels and similar places everyone will be enumerated and the sample chosen later at the census office. In other cases the person in charge of the institution will select the sample from a list of all those present on Census night.) The "smaller" institutions which have been selected for inclusion in the sample will be included among the sample addresses in your record book and in these cases everyone present must be enumerated. Whatever circumstances you may find at any particular institution you must not alter the size category to which it has already been

allotted. For example, if a 'smaller' institution is discovered to have fifty residents it must not be added to your list of 'Large Institutions' but dealt with according to the rules for the 'smaller' category.

If you find that an establishment shown in your list of 'Large Institutions' has changed in character and is no longer an institution (for example, an hotel which has been converted into flats), enumerate everyone in the premises but on the basis of private households in private dwellings. Apply instructions 10 and 12 to discover how many households and dwellings there are.

14 Sample addresses

These are the addresses listed in your record book and they indicate the buildings which you will have to visit. The addresses have, in the main, been selected from—

- (a) 1961 census records in the case of properties in existence at that time; and
- (b) local rating lists for properties which have been brought into rating since April 1961. (For reference purposes only, addresses from this source show the identification 'N' followed by a number.)

Sample addresses for properties brought into rating during (i) January and February 1966 and (ii) March 1966 will not become available until (i) mid-March and (ii) early April. If such an address occurs in your district you will be notified by your census officer and instructed to add it to the addresses in your record book. You must treat any added address in the same way as the others, but delivery of the form can, if necessary, be deferred until just after Census day (see instruction 46).

In most cases the sample address will relate to an ordinary dwelling, that is a house, bungalow or purpose-built flat which is occupied by one household. This situation presents no difficulty; the sample address is a dwelling. But a sample address can be any one of the following:

A part of a dwelling.

An institution or just a dwelling within the premises of an institution (see instruction 12).

A residential caravan site.

Wholly non-residential premises (shops, offices etc.)
Premises which are only partially non-residential (for example a shop with a flat or a public house with living quarters).

Property which has become derelict or has been demolished since 1961.

Property which has been rebuilt since 1961 and may now be more than one dwelling.

Where a sample address is a dwelling within the premises of an institution which is not on your list of "Large Institutions", you enumerate the dwelling and the institution (see also Instruction 36(ii)).

The next stage, that is what you must do when you have identified a sample address, is explained in Chapter III.

If you have difficulty in identifying a sample address or in contacting the occupier **YOU MUST NOT SUBSTITUTE** another address for the one listed in your record book.



CHAPTER III

The Enumeration Record

15 General

When you have mastered the basic information in Chapter II you must next learn how to make the entries in your enumeration record book.

Most of the entries in your record book must be made when you deliver the census forms. The sample addresses selected for your district have already been listed in column (b).

It may be, although this will not often happen, that you have two or more record books allotted to your district with sample addresses listed in each book.

16 Address outside the district

If you discover that a sample address listed in your record book is not, so far as you can judge, within the boundaries of your district, report the matter to your census officer.

17 Transfer of addresses

One line has been allocated to each sample address listed and this space will be sufficient for the usual situation where the address will be found to relate to one dwelling occupied by one household. In every other situation except (a) an institution which has no associated separate dwelling or private household and (b) derelict, demolished or non-residential property, you must transfer the sample address to the blank pages at the back of the book so that you have enough space to record all the dwellings and households in

the building in which the sample address is located. You must also transfer any address where the extent of the building has changed since 1961, for example where two houses have been converted into one.

The page number of the second blank page in your record book is shown at the bottom of the flyleaf immediately inside the front cover. Use this page to begin copying the addresses that have to be transferred.

18 Building codes

You will have to code the types of building in which the sample addresses are located. The codes are shown below. They also appear on the back of your appointment card for easy reference when you are out on the job.

BUILDING TYPE	CODE
Any house or bungalow which constitutes a single dwelling; a houseboat	A
A building which consists of non-residential premises plus a single dwelling (for example, a shop with one flat above)	B
A purpose-built block of flats or maisonettes	C
A building which has been converted to provide more than one dwelling	D
A caravan	E

If a building with non-residential premises has more than one dwelling associated with it (for example, a shop plus two dwellings), ignore the non-residential part and code the building C or D according to the relevant circumstances.

19 The households to be enumerated in relation to a sample address

In the usual case the facts will be easy to establish. The sample address will relate to an ordinary house which constitutes one dwelling which is occupied by one household. You will enumerate that household. But where a building is occupied by several households the matter becomes more complicated. You should establish what you have to do as follows:

- (i) Identify the type of building in which the sample address exists.
- (ii) If, under instruction 18, the building is—
 - (a) code A, B or E, enumerate all the households in the building;
 - (b) code C, enumerate all the households in the flat or maisonette which constitutes the sample address;

- (c) code D, enumerate all the households in all the dwellings in the building.
- (iii) If within the grounds of the building in which the sample address is located there is a caravan which is used for residential purposes, include the caravan as part of the address and enumerate the household living in it.

The following examples illustrate the points made above:

1st Example

SITUATION

The sample address is '6, Green Lane'. This is an ordinary house in a terrace. It is one dwelling and is occupied by Mr. and Mrs. Smith and their family (one household).

BUILDING CODE=A

ENUMERATE

The Smith household.

2nd Example

SITUATION

The sample address is '20, Grange Rise'. This is a three storey house and there are four households living in it. The whole house is only one dwelling when instruction 12 is applied.

BUILDING CODE=A

ENUMERATE

All four households.

3rd Example

SITUATION

The sample address is 'The Red Lion, Station Road'. This address is a public house and the landlord lives on the premises. There is no other living accommodation.

BUILDING CODE=B

ENUMERATE

All the households living in the landlord's quarters.

4th Example

SITUATION

The sample address is 'Basement Flat, 12, Queens Road'. This address is in a building which has been converted. Under instruction 12 there are two dwellings in the building. The basement flat is one dwelling and the rest of the house is the other.

**BUILDING CODE=D
ENUMERATE**

All the households in each of the two dwellings which make up the building.

5th Example

SITUATION

The sample address is 'Yew Tree Farm'. This is a single dwelling occupied by one household. There is a caravan in the garden belonging to the farm, which is occupied by a farm-worker and his wife. The caravan is a separate dwelling.

**BUILDING CODE HOUSE=A CARAVAN=E
ENUMERATE**

The household living in the house and the household living in the caravan.

20 Information for the record book

When you have established what households and dwellings must be enumerated in the building containing the sample address:

- (a) If there is only one household in one dwelling (the usual situation), you will then have to find out—
 - (i) the name of the head of the household.
- (b) If the address is one which you have transferred to the back of the book, you will then have to find out—
 - (i) which part of the building is occupied by each household;
 - (ii) the name of the head of each household;
 - (iii) the number of rooms that make up the accommodation of each household;
 - (iv) what group of households occupy any one dwelling;
 - (v) which household(s) form(s) the actual sample address.
- (c) If one dwelling is occupied by two or more households, you will then have to find out—
 - (i) whether the households share the use of any of the rooms in the dwelling;
 - (ii) if 'Yes', the number of rooms shared and the number of households sharing them;
 - (iii) whether, if the shared room is a kitchen, any household uses the shared room (kitchen) regularly for meals.

In shared dwellings you will also have to find out whether each household has the exclusive use of a cooking stove and sink, but this information must be recorded on the 'H' forms, *not* in your record book.

21 How to make the entries in your record book

Col. (a)—see instruction 27.

Col. (b)—already completed with the sample addresses.

Columns (c) to (h)—proceed as follows:

- (i) *One dwelling with only one household*
column (c), enter the building code (see instruction 18)
column (d), enter a dash (—)
column (e), enter the name of the head of the household
column (f), enter '1' or 'S' according to whether there are one or several rooms
column (g) }
and (h) } enter a dash (—) in each column.
- (ii) *Institutional premises*
 - I *without separate dwelling or private household*
column (e), enter the name of person responsible for making the census return
columns (c), (d), (f), (g) and (h), enter a dash (—) in each column
 - II *with separate dwelling or private household*
proceed as in (i) above but making entries for the institution part of the sample address, after transfer to the back of the book, as in (iii) I above.
 - (iii) *Derelict, demolished or other entirely non-residential property*
Make no entries in columns (c) to (h) but enter 'derelict', 'demolished' or 'non-residential', as appropriate, in the Remarks column (p).
 - (iv) *Any other type of sample address*
For any address which is not covered by (i), (ii) or (iii) above you must—
 - I Transfer it to the back of your record book (see instruction 17) and enter the page number on transfer in column (c) against the listed address.
 - II Work systematically through the whole building containing the sample address and record every household and dwelling in that building.

- III Make entries for each household as follows:
 column (c), enter the building code;
 column (d), record the location (for example,
 back rooms, 1st floor);
 column (e), enter the name of the head of
 the household;
 column (f), enter '1' or 'S' according to
 whether the household has one
 or several rooms. But if the
 household shares the use of a
 room with at least one other
 household, enter in column (f)
 the exact number of rooms in the
 household's accommodation.
 Count each shared room as a
 fraction according to the number
 of households sharing it. For ex-
 ample, one room shared by two
 households counts as $\frac{1}{2}$ to each
 household.
- IV Identify the dwellings in the building by
 bracketing together in column (g) the house-
 holds which occupy each separate dwelling.
 If a dwelling is occupied by only one house-
 hold, put a bracket in column (g) against that
 household.
- V Identify the sample address by entering an
 arrow (\leftarrow) against each household which
 forms part of the sample address.

22 Vacant dwellings or parts of dwellings

If a dwelling appears to be completely unoccupied write 'Vacant' in column (e), estimate the number of rooms and enter this figure in column (f). The same applies to an empty part of a dwelling, for example rooms which are normally occupied by a household but are vacant for the time being.

If a dwelling (or part of a dwelling) is inhabited but the occupants are temporarily away (on holiday for instance), write 'Absent' in column (e), estimate the number of rooms and enter this figure in column (f). If you discover the name of the householder, enter it in the Remarks column.

Wherever you write 'Vacant' or 'Absent' you will later have to find out whether the accommodation was, in fact, occupied on Census night. If it was, you will have to issue a census form.

23 Rebuilding since 1961

If you have reason to think that the original sample address has been pulled down and rebuilt since 1961, enter 'Rebuilt'

and, if possible, the year in the Remarks column.

- 24 The completion of columns (j) to (o) is dealt with in later chapters.
- 25 The following examples and those in Appendix B (caravan sites) show you how to complete columns (c) to (h):

Sample address b	Building Code or Page Ref no. c	Location of each household d	Name of head of household e	Rooms 1 or 2 f	Dwelling Brackets g	Included in Sample Address h

1st Example (the usual situation)

Sample address—a building—a dwelling occupied by one household.

12 Queen's Drive	A	—	Taylor	S	—	—
------------------	---	---	--------	---	---	---

2nd Example

Sample address—a building—a dwelling occupied by three households

Address listed at 24 Acacia Avenue	6 ←	This is the number of the page at the back of the book to which the address has been transferred Entries on page 6				
24 Acacia Avenue	A A A	Ground floor	Hall W.C. Cov	S 1]	← ←

3rd Example

Sample address=part of a dwelling. The dwelling=a building. There are two households in the dwelling, one has 3 rooms the other has 2 rooms and, in addition, they share a kitchen. The kitchen is used for meals by one of the households.

Address listed at 26 Fircraft Road (First floor)	6 ←	number of page at the back of the book to which the address has been transferred Entries on page 6				
26 Fircraft Road (First floor)	A A	Ground floor	Bower Green	2½]	←
Entry to the Remarks column (p) : 'Kitchen shared, used for meals'.						

Sample address b	Building Code or Post Office Number. c	Location of each household d	Name of head of household e	Rooms 1 or 2 f	Dwelling Bracket g	Included in Sample Address h
---------------------	---	------------------------------------	--------------------------------------	----------------------	--------------------------	--

4th Example

Sample address=a dwelling=part of a converted building.
The whole building has been fully converted and contains four dwellings.
There is one household in each dwelling.

Address listed as Brentwood Flat, 4 King's Avenue	6 ←	number of page at the back of the book to which the address has been transferred				
		Entries on page 6				
Brentwood Ground floor	D	Taylor	Holmes	S	1	←
First floor	D	Holmes	Holm	S	1	←
Second floor	D	Holm	King	S	1	←

5th Example

Sample address=a building=a shop with a flat occupied by one household.

Address listed as 2 High Street	6 ←	number of page at the back of the book to which the address has been transferred				
		Entries on page 6				
2 High Street	— B —	Shop	Flat above	Wood	S	1

6th Example

Sample address=institutional premises with a separate dwelling.

Address listed as Belmont Hospital Weston Road	8 ←	number of page at the back of the book to which the address has been transferred				
		Entries on page 8				
Belmont Hospital Weston Road	— B —	Hospital	Hospital Flat	Dr. Wood	S	1

7th Example

Sample address=a building=a dwelling occupied by one household.
The building now consists of what, in 1961, were two buildings. (Two cottages have been knocked into one).

Address listed as 17 Green Lane	8 ←	number of page at the back of the book to which the address has been transferred				
		Entries on page 8				
17 Green Lane	— A —	17/19 Green Lane	Robinson	S	1	←

Note the Remarks column (p) with the date of the conversion if known.



CHAPTER IV

Tour of District and Delivery of Leaflets

26 Tour of district

When you have studied these instructions, and before you attend for training, make a tour of your district to plan your route and see what types of property you have to enumerate. A map showing the boundaries of your district is supplied inside the front cover of your record book. The tour will enable you to get some idea of how many census forms of each type you are likely to require, and if it brings to light any special difficulties which are not covered in these instructions, you will have time to raise them with your census officer.

27 Order of route

Column (a) in your record book is headed 'Route Order No.'. Use this to number the addresses in the order in which you intend to visit them. It cannot be taken for granted that the successive addresses listed will be close to each other and addresses on opposite sides of the same street may be shown in different parts of your list. Plan your order of route carefully to avoid unnecessary retracing of your steps.

28 Addresses listed more than once

When preparing your route you may find that the same address appears more than once in the list. It may, for example, appear among the addresses taken from the 1961 census records and also among the rating list addresses. The double-

entry may not however become apparent until a later stage when, for example, you find that 'Yew Tree Cottage, Bakeham Lane' is one and the same as '14 Bakeham Lane' and both are listed in your book.

If an address is listed more than once complete your record against one of the relevant entries, enter cross references against the other(s) and write 'Duplicate' in the Remarks column. An address listed as a 'Large Institution' must not be marked 'Duplicate'. If it occurs elsewhere, for example among the rating list addresses, mark that entry 'Duplicate' and enumerate the address as a 'Large Institution'.

29 Delivery of leaflets

You have been provided with supplies of two leaflets, one addressed to householders (E.4) and the other to managers of hotels and like establishments (E.5). The purpose of the leaflets is to tell these people about the census and warn them of your intended visit. Beginning on Saturday, 2nd April, you must deliver a leaflet E.4 to each sample address, excluding large institutions, in your record book, and a leaflet E.5 to each hotel, holiday camp etc. included in the list of large institutions. (Large establishments of other types will not receive leaflet). There is no need to contact the occupier or manager at this stage. Where it is evident that the premises at the sample address are occupied by more than one household (if, for example, you find that the front door post has bell-pushes naming separate householders), leave enough leaflets for each of the probable number of households. The number of household leaflets delivered will be only a rough guide to the number of census forms needed. In many cases you will not find out how many households occupy a building until you actually deliver the forms. *Delivery of leaflets must be completed by Thursday, 7th April.*

30 Difficulty in finding or identifying an address

If you have difficulty in finding a particular address the local post office can probably help you. If you are not sure to which premises a listed address refers, ask your census officer. Some of the addresses taken from the 1961 census records may be difficult to identify where, for example, names of houses have changed or houses identified by names in 1961 have since been given numbers.



CHAPTER V

Delivery of Forms

31 Preparation of forms

Before you set out on your delivery round, enter on each form, in the panel 'For Enumerator's Use', the reference numbers of your census district, area and enumeration district which appear on the front cover of your record book. The schedule number will be entered after enumeration (see instruction 63). On forms 'F' and 'L' you must, in addition, record the area and enumeration district numbers in the panel on lists F.1 and L.1.

32 Items to be carried

Take the following items with you when you deliver the forms:

- (a) This book of instructions.
- (b) Your enumeration record book.
- (c) Your appointment card.
- (d) Spare copies of each type of leaflet.
- (e) A piece of board to use as a rest when making entries in your record book.
- (f) An appropriate supply of the various types of forms (H, P, I etc.) likely to be needed.
- (g) Some forms E.7 for use with any P forms which you may be asked to issue for the purpose of personal returns.

- (h) Some envelopes. These will be issued with 'P' forms for personal returns and individual returns made by people in hotels. They may also be asked for by some people in institutions.
- (i) Your pen (plus a spare).
- (j) A few pins.
- (k) A suitable case for carrying your supplies.

33 Sunday delivery

Some people object to being called on on a Sunday. If this happens put off delivery to another day.

34 Helping the public

When you call your aim should be to win the public's co-operation. If you are asked for explanations, do your best to give them. The information in Appendix A should help you.

35 Information for the record book

Your first job at each sample address will be to find out the details for that address and enter them in your record book as described in Chapter III. In this way you will record the name of the person responsible for completing the census form that you deliver.

36 Census forms (sometimes called schedules)

The type of census form to be issued will vary with circumstances, as described below. Before you issue a form enter the name and address in the panel 'For Enumerator's Use', together with any other information which the form requires you to record.

- (i) 'H' form (white), with separate explanatory notes and example, for private households.

This form is the one you are likely to issue in the majority of cases.

If the household shares a dwelling, before issuing the form you must—

- (i) find out and record in the panel 'For Enumerator's Use' whether the household has exclusive use of a cooking stove and sink; and
- (ii) find out the answers to (a), (b) and (c) of question 24 (Rooms) and complete that question on the form.

(ii) '*I*' form (peach), with separate explanatory notes and example, for smaller institutions

This form is to be issued for any hotel or institution (including an H.M. Forces establishment) which is discovered to be included in your list of addresses but does not appear in the list of 'Large Institutions' at the back of your record book. (A different form must be used for the 'Large Institutions', see (v) below). The '*I*' form contains spaces for six persons and in some cases it will be necessary to issue several copies to cover everyone in the institution.

Enter on the form the type of establishment ('boarding house', 'nursing home', 'old people's home' etc.) and, if it is a hotel or boarding house, the number of rooms (see instruction 11).

If you discover that there are separate private households within the boundaries of the institution (see instruction 13) you must issue '*H*' forms to these and the people in them will not be included on the '*I*' form for the institution. See also top of page 17.

(iii) *Certification form 'C'* (pink) for hotels etc.

This form must be issued to the manager or other person responsible for making the census return in premises such as hotels, boarding houses, holiday camps, youth hostels, lodging houses, etc. which are listed in your record book under the heading 'Large Institutions'. The responsible person will arrange for individual returns (see (vi) below) to be made by all the people present in his establishment.

Enter on the form the nature of the premises ('hotel', 'holiday camp', 'youth hostel' etc.) and the number of rooms (see instruction 11).

Any separate private household will not be included on the '*C*' form but will require an '*H*' form instead.

(iv) *Listing form 'F'* (gold) for H.M. Forces establishments

This form must be issued to the commanding officer or person appointed to make the census return for any H.M. Forces establishment listed in your record book as a 'Large Institution'. The responsible person will list on the '*F*' form the names of all personnel present, including any resident civilians, and individual returns (see (vi) below) must be made by one person in ten on the list (selected by the responsible person in accordance with the instructions on the form). Each '*F*' form has spaces

for listing 100 names. More than one 'F' form may be needed in some cases.

Married quarters must not be included as part of the establishment. If a married quarter is included in your list of sample addresses you will issue an 'H' form as for an ordinary household.

(v) *Listing form 'L' (blue) for large institutions*

This form must be issued to the chief resident officer or other person in charge of the premises listed as 'Large Institutions' in your record book, other than those dealt with in (iii) and (iv) above. The premises included may be hospitals, convalescent homes, religious communities, prisons etc. The responsible person will list on the 'L' form the names of all the people present in his establishment (resident staff must be listed separately from patients or inmates) and individual returns (see (vi) below) must be made by one person in tan on each list (selected by the responsible person in accordance with the instructions on the form). Each 'L' form has spaces for listing 50 staff and 50 patients or inmates. More than one 'L' form may be needed in some cases.

Enter on the form the type of establishment ('Hospital for chronic sick', 'boarding school', 'H.M. Borstal' etc.).

If you discover that there are separate private households within the boundaries of the institution (see Instruction 13) you must issue 'H' forms for these and the people in them will not be included on the 'L' form for the institution.

Dwellings for prison staff must not be included as part of the institution. If a prison officer's dwelling is included in your list of sample addresses you will issue an 'H' form as for an ordinary household.

(vi) *'P' form (grey), with separate example, for individual or personal returns*

This form must be issued to hotel managers and persons in charge of H.M. Forces establishments and large institutions for obtaining the individual returns referred to in (iii), (iv) and (v) above.

The 'P' form must also be issued to any qualified person who applies to make a separate personal return (see Instruction 38).

Envelopes (E.12) must be issued with the 'P' forms for hotels (see leaflet E.5) but otherwise only if required.

37 Usual residence leaflets

These leaflets (E.6) are for the guidance of people responsible for the census returns in hospitals and certain other institutions, and indicate how the questions on usual residence should be answered. You must issue at least one copy of the leaflet in any relevant case (the types of institution concerned are listed in the leaflet) when you deliver the form 'I' or 'L'.

38 Separate personal returns

If an individual is unwilling to disclose to the head of a household or 'smaller' institution the personal particulars required for entry on a census form 'H' or 'I', that person can, if he (or she) is aged 16 years or over on Census day, apply to make a separate personal return. Application should normally be made to you when you deliver the form for the household or institution, but if the applicant fails to get in touch with you, he (or she) may apply to the census officer.

Before you issue a 'P' form for a separate personal return try to find out why the person has asked for it. He may have a mistaken idea of the sort of questions being asked, or he may form a separate household and thus qualify for the issue of an 'H' form. If anyone insists on having a personal form you must issue one but do not issue until you have confirmed that it is necessary.

When you issue a 'P' form for a personal return, you must—

- (i) write the name and address of the head of the household (or institution) in the panel 'To be filled in by the Manager etc.';
- (ii) write 'separate' on the top right corner inside;
- (iii) use a form E.7; attach part I to the 'P' form and part II to the 'H' or 'I' form to which the personal return relates.

39 Record of type of form delivered

Enter this information in column (i) of your record book. Use the Remarks column to record the issue of a form for a personal return (write 'Pers.') or the issue of more than one form or type of form. For example, write '4 H, 1 Pers' or '1 L, 70 P'. When collecting the completed forms you will use these entries to check that you collect all the forms you have issued.

40 Refusal to accept delivery

If anyone refuses to accept delivery of a form try to find out the reason and, if there is any misunderstanding about the census, to clear up the difficulty and persuade the person to

co-operate. If this is unsuccessful, tactfully draw the person's attention to his legal obligations and if he still refuses, tell him that you must report the matter to your census officer. Do not enter into an argument or, at this stage, try to press the matter further. Enter the householder's name (or 'Householder' if you have been unable to obtain the name) and address on the census form and put it through the letter box or under the door at a later convenient time. Make a note of the refusal and of the date and time when you delivered the form, in the Remarks column of your record book. Give your census officer a written and signed statement of the facts.

41 Failure to contact the householder

If after at least three calls at an address you have been unable to get a reply, put the form through the letter box or under the door with an explanatory leaflet E.8. Note the Remarks column of your record book 'F.C. on delivery' and inform your census officer.

42 Date of delivery of forms

Delivery must not start before Tuesday, 12th April and you must make every effort to complete it by Thursday, 21st April. DO NOT leave delivery until the last moment.

43 Time of collection

When you deliver a census form tell the person concerned when you expect to call to collect it and ask him to have it ready for you. If possible the completed form should be handed over by a responsible person as you may need to ask questions if the answers are incomplete or obviously inconsistent. Any query arising from a personal return can be raised only with the person who completed the 'P' form.

44 Report of progress

Report progress to your census officer not later than Monday, 18th April. If you run short of forms or any other supplies, get in touch with him at once.

45 Completion of delivery

As soon as you have completed the delivery of forms and in any case not later than Thursday, 21st April, make a report to your census officer on card E.9.

46 Late addition to the list of sample addresses

If your census officer instructs you at a late stage to add a sample address (see instruction 14) to the list in your record book deliver the explanatory leaflet and the form together. If it is too late to do this before Census day you must do so as soon as possible afterwards and in any case not later than Wednesday, 27th April.

47 Summary

For each sample address you will find out how many households must be enumerated. You will do this by identifying the type of building in which the sample address is located. If the address relates to a building which is a single dwelling or to a flat or maisonette in a purpose-built block, you will enumerate all the households in the dwelling. In every other case you will enumerate all the households in all the dwellings in the building. For institutions you will find out whether there are any separate households and separate dwellings. The principal points of enumeration procedure are summarised on the following pages.

A. ONE DWELLING=ONE HOUSEHOLD

ASK	ENTRIES IN RECORD BOOK	OTHER ACTION
Name of head of household	Col. (e)	Enter name and address (col. (b)) in appropriate panel of 'H' form.
How many rooms ?	Col. (f)=1 or S Col. (e). Enter building code. Col. (g) and (h). Enter dashes (-)	If more than 6 people issue enough forms for everyone to be recorded. If application is made for a separate personal return, follow instruction 38.
How many people are expected to be present on Census night?	Col. (j). Enter type of form issued. If more than one form, note number in col. (g).	

B. ONE DWELLING=TWO OR MORE HOUSEHOLDS

Name of head of household	Transfer address to the first available space at the back of the book.
Part of building occupied	Note new page no. in col. (c) against original entry and record the following information on the new page :
Has household exclusive use of— <input checked="" type="checkbox"/> cooking stove ; <input checked="" type="checkbox"/> sink ?	For each household sharing col. (e) col. (f)
How many rooms ? Is the use of any room shared with another household ?	Complete panel on 'H' form marked 'For Enumerator's Use'.
If NO (<i>If Yes, see overleaf</i>)	col. (f) Enter actual number of rooms Record answers to question 24 overleaf.

ASK	ENTRIES IN RECORD BOOK	OTHER ACTION
If YES: (i) How many rooms are shared with how many households? (ii) Is a kitchen shared and if so does any of the households use it regularly for meals?	col. (f) Enter exact number of rooms allowing appropriate fraction for the shared room(s). If kitchen shared and used for meals, note col. (p)	Record answers to question 24(a), (b) and (c) on the "H" form before issue.
How many people are expected to be present on Census night?	col. (g) Enter building code col. (h) Enter type of form issued. If more than one form, note number in col. (g) col. (g) Bracket household which occupy the dwelling. col. (h) Indicate household(s) which relates(s) to sample address.	<p>If more than 6 people issue enough forms for everyone to be recorded.</p> <p>If application is made for a separate personal return, follow instruction 38.</p>

C. A CONVERTED BUILDING CONTAINING MORE THAN ONE DWELLING

D. SMALLER HOTEL, INSTITUTION OR H.M. FORCES ESTABLISHMENT

ASK	ENTRIES IN RECORD BOOK	OTHER ACTION
Whether there are any separate private households or dwellings }	If YES, transfer address to the back of the book	
(i) Without private household(s) : Name of manager, officer or other person in charge Type of establishment Number of rooms if a hotel, boarding house etc. How many people expected to be present on Census night?	col. (e)	<p>Enter name and address in appropriate panel of 'T' form.</p> <p>Enter in appropriate panel of 'T' form.</p> <p>If more than 6 people issue enough forms for everyone to be recorded. If application is made for a separate personal return, follow instruction 38.</p> <p>In appropriate cases issue a 'Usual Residence' letter with the 'T' form.</p>
(ii) With private household(s)		<p>cols. (c), (d), (f), (g) and (h). Enter dashes (-) col. (i) Enter type of form issued. If more than one form, note number in col. (p)</p> <p>Transfer address to the first available space at the back of the book.</p> <p>Note new page No. in col. (c) against original entry and record required information on the new page.</p> <p>Enumerate Inquiries under procedure D, (i) above, except—</p> <p>col. (d) Enter 'Hotel', 'Hospital', etc.</p> <p>col. (h) Enter an arrow (→).</p>

Enumerate households(s) under procedure A, B or C, as appropriate, but always complete each of like columns (c) to (h)

NOTE. Houses for prison staff and married quarters for H.M. Forces establishments do not count as part of the institution.

E. LARGE INSTITUTIONS

8

ASK	ENTRIES IN RECORD BOOK	OTHER ACTION
Whether there are any separate private households or dwellings etc. I Hotel, boarding house, holiday camp	If YES, transfer address to the back of the book (as D. (ii)).	
(i) Without private household Name of manager or other person in charge Nature of premises Number of rooms How many people expected to be present on Census night?	→ col. (e)	Enter name and postal address of the establishment in appropriate panel of 'C' form. Enter in appropriate panel of 'C' form. Issue appropriate number of 'P' forms plus a few spaces, and the same number of envelopes.
(ii) With private household	col. (e), (d), (f), (g) and (h). Enter dashes (-) col. (i) Enter type of form issued col. (j) Enter number of 'P' forms issued	Transfer to the back of the book Enumerate Hotel or similar place under procedure E.I.(i) above except— col. (d) Enter 'Hotel', 'Holiday Camp', etc. col. (h) Enter an arrow (←→).
	Enumerate Household(s) under procedure A, B or C, as appropriate.	
	II Hospitals, patients, residential schools etc. (i) Without private household Name of officer or other person in charge	Enter name and postal address of the establishment in appropriate panel of 'L' form.
	→ col. (e)	

Type of establishment How many people expected to be present on Census night?	→ Enter in appropriate panel of 'L' form. → Issue enough 'L' forms for everyone to be listed and enough 'P' forms for one tenth of the people, plus a few spares, also a few envelopes for use by anyone who wants to hand over his completed 'P' form under sealed cover. In appropriate cases issue a 'Usual Residence' leaflet with the 'L' form.
(ii) With prepare household(s)	cols. (2), (4), (6), (8) and (10). Enter dashes (-). col. (1) Enter type of form issued. col. (9) Enter number of 'P' and 'L' (if more than one) forms issued. Transfer to the back of the book. Enumerate Institution under procedure E.II (i) above except... col. (10) Enter 'Hospital', 'Prison' etc. col. (11) Enter an arrow {←→}.
Enumerate Household(s) under Procedure A, B or C as appropriate, but always complete each of the columns (c) to (h)	→ Issue enough 'P' forms for everyone to be listed and enough 'L' forms for one tenth of the people, plus a few spares, also a few envelopes for use by anyone who wants to hand over his completed 'P' form under sealed cover.
NOTE: Houses for prison staff do not count as part of the institution.	
III H.M. Forces establishments Name of person responsible for making the return How many people expected to be present on Census night?	cols. (2), (4), (6), (8) and (10). Enter dashes (-). col. (1) Enter type of form issued. col. (9) Enter number of 'P' and 'L' (if more than one) forms issued. NOTE: Married Quarters do not count as part of the establishment.



CHAPTER VI

Collection of Forms

48 Items needed

Take the following with you on your collection round:

- (a) This book of instructions.
- (b) Your record book.
- (c) Your appointment card.
- (d) Spare copies of each type of form (H, P, I etc.).
- (e) Forms E.10 and envelopes E.10A.
- (f) Your pen (plus a spare).
- (g) A piece of board to use as a rest when making entries in your record book.
- (h) A suitable case for carrying your supplies.

49 Date of collection

Collect as many as possible of the forms on Monday and Tuesday, 29th and 30th April. Collection should be completed by Thursday, 2nd May. As you collect each form enter a tick (\checkmark) in column (K) against the name of the householder in your record book.

50 Failure to make contact

If you are unable to collect a form on the Monday or Tuesday after having made at least three calls at the address, at different times of day, leave a form E.10 (this tells the householder that you have called and asks him to post the form to you) and an envelope E.10A addressed to yourself. Note the Remarks column of your record book "F.C. on collection". If the form has not reached you through the post by Thursday, 2nd May, call again at the address. If you are still unable to collect the form, report the matter in writing to your census officer.

51 Separate personal returns and multiple forms

Make sure, by reference to the Remarks column of your record book, that you collect all the separate personal returns (on 'P' forms) and in other cases the complete return where it has spilled over onto two or more forms. If possible, collect all the forms issued, including those not used or spoilt.

Check also that you receive any form which has been issued by your census officer to an applicant for a personal return. Where this has happened only questions 1 and 2 on the main form will have been answered for this person. Enter 'Pers.' in the Remarks column in your record book.

52 Forms sent direct to the census officer

If a householder or anyone who has completed a separate personal return is particularly anxious to send the completed form to the census officer instead of handing it over to you, he may be allowed to do so. Tell your census officer to expect the form. Enter 'C.O.' in column (k) of your record book and prepare a dummy form of the same type by completing the panel 'For Enumerator's Use' and writing 'Form being sent direct to census officer' across the spaces for question 1. Put this dummy form with the completed forms and at a later stage (instruction 63) enter on it the appropriate schedule number.

53 Examination of the forms

When you receive a form you must look at it on the spot to make sure that it is legible and that answers have been given to all the appropriate questions. For the 'H' form this entails making sure that—

- (i) questions 1 to 9 have been answered for everyone on the form;
- (ii) the section containing questions 10 to 22 has been answered for everyone whose date of birth is earlier than 26th April 1951;
- (iii) question 23 has been answered for everyone whose date of birth is earlier than 26th April 1948;
- (iv) questions 24 to 27 have been answered.

If you are able, at this stage, to apply some of the other checks shown on your 'Check List' in Appendix C you may save yourself work and a return visit to the address later on.

A form which has not been signed but appears to be complete in every other respect, can be accepted.

54 Large households

Whenever you collect 'H' forms for a household with 10 or more people or which occupies 10 or more rooms, note

the Remarks column of your record book to show whether this is an ordinary private household or a boarding house, nursing home etc. for which an 'H' form has been used instead of an 'I' form.

55 Obtaining further information

The person responsible for completing a census form and anyone included in the return have a legal obligation to give any information needed to complete or correct the form.

If you are unable to get the answer to any question enter 'N.K.' (not known) and your initials in the appropriate space on the form. If you can't get a complete answer enter any information you obtain, no matter how scanty it may be.

56 Corrections

If you make a correction on a form, strike out the faulty information, but allow it to remain legible, and write in the new information, clearly, and as near as possible to the original entry. Do not erase anything from the form.

57 Vacant or absent

Where, under instruction 22, you recorded 'Vacant' or 'Absent' on your delivery round, you must find out whether anyone spent Census night in the accommodation. If they did, proceed in the normal way and obtain completion of a census form. Delete the original entry in column (e) of your record book and write in the appropriate information.

58 Removals

If you are unable to collect a form because the household has moved away, write 'Removal' in the Remarks column of your record book and 'Vacant' in column (e). But, if there is a new occupier and the household was there on Census night, enter the new occupier's name in column (e) and issue a form for that household.

59 Lost or insufficient forms

If a householder says that the original form has been lost or destroyed, issue another of the same type. If the original form was insufficient for all the people present on Census night, issue extra forms as necessary.

60 Refusal to complete a form

If anyone refuses to fill up all or any part of the census form which has been issued to him, do your best, by tactful persuasion, to get him to do so. Ask if he is willing to give the information to you to complete the form on his behalf. If he is

adamant in his refusal do not enter into an argument but, after making sure that he is aware of his obligation and of the penalty attaching to a refusal, tell him that you must report the matter. You must then write 'Information refused' in the Remarks column of your record book and make a full written report to your census officer. Give details of the questions that you put to this person and of the information that was refused. Your statement may be used in any subsequent legal proceedings.

61 Completion of collection

As soon as you have collected all the forms for your district, report to your census officer on card E.11. If collection is not complete by the evening of Tuesday, 28th April, get in touch at once with your census officer and explain why some forms are still outstanding. On no account must any forms remain uncollected after Thursday, 29th April.



CHAPTER VII

Duties after Enumeration

62 Separate personal returns

Copy the particulars from the 'P' form onto the 'H' or 'I' form to which the person belongs. Leave the parts of form E.7 attached to the appropriate forms. The personal return can then be set aside until you hand in your documents to your census officer.

If, on examination of the main form, you find that you have to go back for further information, do not disclose to anyone else any of the particulars which have been copied from the personal return.

63 Arranging and numbering the forms

Arrange the completed forms to agree with the sequence in your record book (the forms for the addresses transferred to the back pages will come after the others) and make sure that all the forms for the same establishment are together.

Then number the forms in a single sequence, using the appropriate box in the panel marked 'For Enumerator's Use'.

(i) Private households

Allot a separate number to each household. If a large household has used more than one 'H' form put the same schedule number on each. A household in a shared dwelling must not be given the same number as any other household in the dwelling.

(ii) Institutional premises

Allot a separate number to each establishment and, where more than one 'I', 'F' or 'L' form has been used by an establishment, put the same schedule

number on each. Put the allotted number on lists F.1 and L.1. All the 'P' forms (individual returns) relating to any one establishment must be given the schedule number allotted to that establishment; in addition they must be numbered consecutively within the batch, this number being entered above the panel "To be filled in by the Manager etc."

The 'H' form for any private household associated with an institution must be given its own separate schedule number (see (i) above).

When you have numbered the forms, copy the numbers into column (i) of your record book against the appropriate entries.

64 Re-examination of forms and removal of questions panels

You will have made a first check when you collected the forms. Look at them in more detail now and apply the 'Check List' in Appendix C. The notes to the forms will show you what sort of answers are required. If any of the information is incomplete, inconsistent or otherwise unacceptable, go back to the person responsible for filling in the form and try to put it right.

If any form is torn or very dirty, copy the particulars onto a blank form of the same type and write 'COPY' at the top. Substitute the copy for the original among the numbered forms and keep the original aside for handing over to your census officer.

If any answer has been written in the questions panel, copy the information into the appropriate space in the main part of the form.

When you have finished your re-examination, made any necessary transcriptions and are satisfied that all queries and omissions have been put right, tear off the questions panel on forms 'H', 'I' and 'P' along the perforation. You can destroy these panels. If however you have any reason to think that legal proceedings may need to be taken in a particular case, leave the appropriate form intact.

65 Completion of the record book

The work which now remains to be done forms the first step in assembling the data required for the preliminary results. Your contribution means that these results will be available sooner than would be possible if all the totalling had to be done at the Census Office.

Column (b)

For the front pages only (that is excluding the back pages to which you have transferred addresses), enter the page totals of sample addresses.

Column (k)

The page total for this column must equal the difference between the first and last schedule (form) numbers shown in column (l), plus one.

Columns (m), (n) and (o)

- (i) For each separately numbered 'H' and 'I' form enter, on the appropriate line, the total number of people enumerated, the number present and the number absent (col. (m)=col. (n)+col. (o)).
- (ii) For each separately numbered 'C' form enter in columns (m) and (n) the number of people shown in the certificate on the form. Enter a dash (—) in column (o).
- (iii) For each separately numbered 'F' and 'L' form count the number of names shown on the associated lists (F.1 or L.1 plus L.2) and enter this figure in columns (m) and (n). Enter a dash (—) in column (o).

As you complete each page add up the entries made and enter the totals in the first set of boxes. For the front pages where each entry is included in the sample address, repeat these totals in the second set of boxes. For the back pages which contain the transferred addresses, add up the entries for lines marked ← in column (h) and enter these sub-totals in the second set of boxes.

Copy the page totals and sub-totals into the 'Abstract of Record' on the inside back cover and complete the 'Institution Abstract'. The 'Institution Abstract' must relate to all premises listed as 'Large Institutions', that is including any which may have become, and been enumerated as, private dwellings.

66 Delivery of documents to your census officer

As soon as you have completed all your duties, and in any case NOT LATER THAN MONDAY, 9th MAY, you must deliver personally to your census officer—

- (i) all the completed forms, unfolded and in numerical order;
- (ii) your record book;
- (iii) the separate personal returns and any forms which you have re-written (see instructions 62 and 64);
- (iv) all the unused forms and documents in your possession; and
- (v) your appointment card.

67 Errors or omissions discovered by your census officer

If on examination of your material your census officer finds any errors or omissions, he may require you to correct them and, if necessary, to seek further information. It is part of your duties to comply promptly with any such instruction.

APPENDIX 'A'

Reasons for the Census and Notes on some Questions you may be asked

PURPOSE

Why do we need a Census?

The purpose of a census is explained in the preliminary leaflet. It is to count the people within the country and to discover other facts about them, such as their age, their house, their job and so on. The census supplies basic statistics that are essential for studying the country's social and economic problems and deciding what can be done about them. Only questions to which the answers are really needed are being asked. The first census in Great Britain was held in 1801 and there has been one every ten years since, with the exception of the war year 1941.

TIMING

Why have a Census in 1966?

The holding of a census in 1966, only five years after the last census in 1961, breaks the traditional ten yearly cycle although the Census Act permits a census to be held every five years subject to Parliament's approval.

We are living in a period of rapid change and development and the Government cannot wait until 1971 for the firm statistics that only a national census can provide. Every year something like ten per cent of the whole population moves to a new address. With internal migration on such a scale the population estimates for individual areas of the country become less reliable as the years between censuses pass. Even a proportionately small flow of people into a populous area could seriously affect the amount of land and of money required for providing housing, schools, hospitals and other services for that area.

Why Sunday, 24th April 1966?

A Sunday in April has come to be accepted as the date for a population census in this country; both the 1951 and 1961 censuses were held on Sundays in April.

The principal reason for choosing a Sunday is that it is the night of the week when the largest number of people are at home. 24th April is after Easter and avoids most of the

holiday movement; it is also a time of the year when there is some chance of tolerable weather for the enumerator and when Summer Time gives the enumerator an extra hour of daylight for his work.

RESULTS

What results shall we get and when?

Census figures show the number and characteristics of people, households and dwellings in the various parts of the country. The first totals for larger areas will be available about three months after Census day; more detailed results will follow later. Publication of the main results is expected to be complete within two years of the census.

What use are these results?

They are of primary value to the Government for the efficient administration of the country; orderly planning must be geared to population changes and movements. Census statistics are also used by many people other than the Government, including local authorities, research workers in social and economic fields, market researchers, and management in trade and industry.

SAMPLING

Why a sample census?

A sample census is cheaper and a careful study has shown that the sample will produce information accurate enough to meet the need for up-to-date information for social and economic planning. The sample is intended to give reliable figures for the country as a whole and for the larger areas where major problems of economic development and land use are likely to arise.

How is the sample chosen?

The sample has been organised so that everyone in the country has an equal chance of being included; it is pure chance that one household rather than another has been chosen. The sample will operate in this way:

- (a) the sample of ordinary private houses has been chosen by computer from the 1961 census records. Houses built since 1961 are being chosen from lists of newly-rated property in the local valuation offices. Every tenth dwelling is selected. All the people living in the selected dwellings will be enumerated in the sample census. The smaller 'institutional' premises such as small boarding houses and nursing homes are being treated in exactly the same way as private houses;

- (b) the larger hotels and boarding houses are all included in the census and, to avoid sampling bias, everyone in them will be enumerated;
- (c) all other institutional premises, such as hospitals, schools and colleges, military camps and ships, will be brought into the census but only one tenth of the persons staying in them will be enumerated;
- (d) the people living in one tenth of the caravans on residential sites will also be counted.

These sampling arrangements were tested in the Spring of 1964 and found satisfactory.

Does it matter if another address or person is substituted for the one chosen for the sample?

Yes, very much. If there is any substitution the sample may no longer be representative of the whole population and the value of the census results will be impaired.

NAME

Why are personal names required?

They help to ensure that people are not missed in the enumeration, or included twice, and to prevent simple errors like counting Mary Jones as a male. When the answers are converted to punched cards for processing purposes, names are not included.

PREVIOUS ADDRESS

Why ask questions about previous residence?

The replies to these questions will show the extent and character of internal population movements during the past five years and will help in the assessment of future trends.

HOUSING

Why all these questions about houses?

The information about peoples' homes is needed as a basis for future housing policy. There is a lack of precise information as to the numbers of owner-occupied and rented properties in various areas. Both the Government and local authorities are anxious to have this information, and to know how many dwellings are not equipped with modern amenities such as adequate toilet facilities.

JOB

Why all these questions about a person's job?

The replies will provide information about the structure and disposition of the working population which is essential for national and regional economic planning.

PLACE OF WORK

What use will be made of 'Place of Work' address?

This information will show the number of people who live in one town or place and work in another. This, together with information about how people travel to work, will help transport authorities and town planners.

PRIVATE TRANSPORT

Why these questions about cars and garages?

Growth of car ownership poses considerable problems for the future. Information about cars and garages will help in framing transport and traffic policies and will assist town planners.

QUALIFICATIONS

Why these details of academic, professional etc., qualifications?

Information about the number of highly-qualified people in this country and of the occupations and industries in which they are employed will provide essential statistics for the formulation of manpower policies and plans for the development of higher education and scientific and industrial training.

ABSENTEES

How will the questions about persons absent help?

The information provided will enable the normal composition of households to be established. The analysis of households by size and characteristics of the members can thus be more accurate and therefore more useful in, for example, the planning of future housing requirements, which depends upon the estimated number by size of households in future years.

SECRETY

Is the information obtained at census kept completely confidential?

Everyone concerned in the census, whether the enumerator, the headquarters officials or the householder himself, who improperly discloses or makes use of information given to him for census purposes commits an offence for which there are penalties. No-one need be afraid that any of his answers will become known to his neighbours or in any way used against him. Census information is used for statistical purposes only and no information about named people is published or given to any other Department or authority.

APPENDIX 'B'

Enumerating a Caravan Site

If a caravan site is included among the sample addresses in column (b) of your record book you will find that a number in brackets, e.g. (4), has been entered in column (d) on the same line. This is the 'random number' which must be used to select every tenth caravan for enumeration. The procedure is as follows:

Sites with few caravans

If the number of caravans on a site is smaller than the 'random number' in column (d), write in the Remarks column of your record book 'Random No....., only....., caravans on site'. No other action is necessary.

Other sites

Where the number of caravans on the site is the same as, or greater than, the 'random number' in column (d)—

- (i) Transfer the address and 'random number' to the back of your record book, and enter the page reference in column (c) for the listed entry.
- (ii) List every caravan on the site (see column (d) of the examples).
- (iii) Select every tenth caravan on the list by applying the 'random number'. If, for example, the 'random number' in column (d) is (4) and there are 26 caravans on the site, you must enumerate the 4th, 14th and 24th caravans on the list.

Do not later substitute another caravan for the one originally selected.

Delivering leaflets and identifying caravans.

When you have selected the caravans to be enumerated deliver the explanatory leaflets to the households concerned and make some note in the Remarks column of your record book that will help you to recognise the selected caravans again when you come to deliver the census forms.

Households occupying more than one caravan

When you deliver the forms to the selected caravans enquire whether the household also occupies any other caravans on the same site. If 'Yes', record this information in the Remarks column of your record book.

Collection of forms

If a selected caravan was unoccupied when you called to deliver a form, visit it on your collection round and find out

whether it was occupied on Census night. If a household was there, issue a form for completion. If the caravan was unoccupied on that night, write 'Vacant' in the Remarks column or, if you have reason to think that it is usually inhabited but the people are away, write 'Absent' instead.

The following examples show you how to make the entries in your record book.

Sample address b	Building Code at Page Ref. c	Location of each household d	Name of head of household e	Rooms 1 or 2 f	Dwelling Bracket g	Included in Sample Address h	Remarks j
---------------------	--	------------------------------------	--------------------------------------	----------------------	--------------------------	--	--------------

1st Example

There are 26 caravans on the site and the random number is (4).

Address listed as <i>Golden Crest Caravan Site</i>	8	Entry in col. (c) = my number of the page to which the address has been transferred.					
		Transfer address and random number to back of book and list every caravan.					
Entries on page 8							
		(6)					
		Caravan No. 1					
		" " 2					
		'Labourers'					
		Caravan No. 3					
		" " 4					
		" " 5					
		" " 6					
		" " 6A					
		" " 6B					
		" " 7					
		'Lakagars'					
		Caravan No. 8					
		" " 9					
		" " 10					
		" " 11					
		" " 12					
		" " 12A					
		'Cheerios'					
		'The Beeches'					
		Caravan No. 14					
		" " 15					
		" " 16					
		" " 16A					
		" " 17					
		" " 18					

Sample address b	Building Code or Page Ref. c	Location of each household d	Name of head of household e	Census 1 or 5 f	Dwelling Building g	Included in Sample Address h	Remarks i
---------------------	--	------------------------------------	--------------------------------------	-----------------------	---------------------------	---------------------------------------	--------------

2nd Example

The household occupying a selected caravan also occupies another on the same site. The random number for the site is (3).

Transfer address and random number to back of book and for every caravan.							
<i>Rabbit Hand Caravan Site</i>	E	(3) <i>'Sea Breeze'</i> Caravan No. 1 " " 2 " " 3 " " 4	Lincoln	3	]	←	Household occupying 3rd and 4th caravans

3rd Example

There are six caravans on the site and the random number is (8).

<i>Hunger Lane Caravan Site</i>		(8) —	—	—	—	—	Random No. (8) only 6 caravans on site.
-------------------------------------	--	----------	---	---	---	---	---

APPENDIX 'C'

Check List

For use with the 'H', 'I' and 'P' forms—see instructions 53 and 64

INFORMATION REQUIRED

Questions 1 to 9 to be answered for everyone

- 1 Forename(s) and surname
- 2 Relationship to head of household
- 3 'Present'
or 'Absent' and a full postal address
- 4 'Here' or full postal address
- 5 'Same' or full postal address
- 6 'Same' or full postal address
- 7 M or F and date
- 8 Single, married, widowed, or divorced
- 9 Village or town followed by county. If abroad name of a country
In London—Name of district and 'London'

Questions 10 to 22 to be answered for anyone aged 15 or over.

10 'Yes' or 'No'	If 'No', 11-18 should be blank and 19 must be answered
11 'Yes' or 'No'	If 'No', 12-18 should be blank and 19 must be answered
12 Name of employer and nature of business or Self-employed with employees and without nature of business	(see explanatory notes)
13 (a) Occupation (b) 'Apprentice', 'Articled clerk', 'Management' trainee' etc.	(if appropriate)
14 (a) 'Yes' or 'No' (b) If 'No', number of hours	
15 An address or 'No fixed place' or 'At home'	

Questions 10 to 22 to be answered for anyone aged 15 or over.

16 Means of Transport. Train, car, private bus, public service bus, on foot, goods vehicle, pedal cycle, solo motor cycle, motor cycle com- bination, tube.	One of these
17 (a) 'Yes' or 'No'	
(b) 'Yes' or 'No'	
18 'Yes' or 'No'	If 'No', 19-21 must be answered.
19 (a) (b) (c) (d) (e) (f)	'Yes' or 'No' to (a). If 'No' to (a), then 'Yes' to (b), (c), (d) or (e), or details at (f).
20 (see explanatory notes)	Name of employer and nature of business or Self-employed with employees and nature of business
21	Occupation
22 'Yes' or 'No'	

Question 23 for anyone aged 16 or over.

23 (a) 'Yes' or 'No'
(b) If 'Yes' to (a), information required at II.

Questions 24 to 27 on 'H' form. Make sure these have been answered.

INDEX

	Instruction No.
Addresses—see sample addresses	
Arranging and numbering forms ..	63
Building :	
Codes ..	18
Definition of ..	9
Caravans ..	19, App.B.
Census Forms:	
Arranging and numbering ..	63
Corrections ..	56
Date of collection ..	49
delivery ..	42
Direct to census officer ..	52
Examination of ..	53, 64
Lost ..	59
Preparation of ..	31
Types of ..	35
Check List ..	53, 64, App.C.
Collection of forms ..	43, 49, 61
Corrections ..	56
Credentials ..	3
Definitions:	
Building ..	9
Dwelling ..	12
Household ..	10
Rooms ..	11
Sample address ..	14
Delivery:	
Documents to census officer ..	66
Forms ..	32, 42, 45
Leaflets ..	29
Derelict or demolished property ..	21
Duties: Summary of ..	2
Dwelling:	
Definition ..	12
Examples ..	12
In institution ..	13
Shared ..	20, 36
Enumeration procedure, summary of ..	47
Enumeration record book—see record book	
Examination of completed forms ..	53, 64
Examples:	
Dwellings ..	12
Entries in record book ..	25, App.B.
Households ..	10, 19

Failure to contact householder	.. .. .. ..	41, 50
Forms—see census forms		
Hospitals—see Institutions		
Hotels—see Institutions		
Household:		
Definition ..	.. .. .. ..	10
Examples ..	.. .. .. ..	10, 19
In Institutions ..	.. .. .. ..	13
Illness	.. .. .. ..	6
Institutions:		
Dwelling in ..	.. .. .. ..	13
Entries in record book ..	.. .. .. ..	21
Enumeration of ..	.. .. .. ..	47
Forms for ..	.. .. .. ..	36
Household in ..	.. .. .. ..	13
Large ..	.. .. .. ..	13
Smaller ..	.. .. .. ..	13
Leaflets, delivery of ..	.. .. .. ..	29
Married Quarters ..	.. .. .. ..	13, 47
Non-residential premises ..	.. .. .. ..	21
Numbering forms ..	.. .. .. ..	63
Occupier absent ..	.. .. .. ..	57
Order of route ..	.. .. .. ..	27
Prison staff houses ..	.. .. .. ..	13, 47
Reasons for census ..	.. .. .. ..	App.A.
Rebuilt property ..	.. .. .. ..	23
Record book:		
Completion of cols. (c) to (h) ..	.. .. .. ..	21
Examples of entries ..	.. .. .. ..	25, App.B.
Final completion of ..	.. .. .. ..	65
Information for ..	.. .. .. ..	20
More than one ..	.. .. .. ..	15
Refusal to accept delivery to complete form ..	.. .. .. ..	40, 60
Removals ..	.. .. .. ..	58
Reports to census officer:		
Collection ..	.. .. .. ..	61
Delivery ..	.. .. .. ..	44, 45
Failure to contact ..	.. .. .. ..	41, 50
Refusals ..	.. .. .. ..	40, 60
Rooms:		
Definition ..	.. .. .. ..	11
Shared ..	.. .. .. ..	20, 21, 36
Sample addresses:		
Description of ..	.. .. .. ..	14
Difficulty in finding ..	.. .. .. ..	30
Households to be enumerated ..	.. .. .. ..	19
Listed more than once ..	.. .. .. ..	28
Outside district ..	.. .. .. ..	16
Transfer of ..	.. .. .. ..	17, 21
Secrecy	.. .. .. ..	4, App.A.
Separate personal returns	.. .. .. ..	28, 51, 62
Sunday delivery	.. .. .. ..	33
Tour of district	.. .. .. ..	25
Training	.. .. .. ..	5
Transfer of addresses	.. .. .. ..	17, 21
Usual residence leaflets	.. .. .. ..	37, 47
Vacant dwellings	.. .. .. ..	22, 57
		57

INSTITUTION ABSTRACT

(See Notes below)

Name of Institution	Page Number	Form Type C, L, P or NIL	Number of persons in the private households, if any, associated with the institution (as enumerated on the "H" forms)		Number of persons present in the institution excluding members of private households		GRAND TOTAL of persons present (y + z)
			Total Enumerated	Total Present	y	w	
TOTAL							
Sub-total I for lines with C or columns							
Sub-total II for lines with L, P or NIL in column t							

NOTES

1. Make entries for each establishment shown in column x;
2. The sum of the sub-totals must equal the TOTAL.

- column t Enter C, L, or P to indicate the type of form issued for the establishment, as in column x. If there is nobody resident in the institution or if it has come to be an institution and contains private households only, write 'Nil' in this column and complete columns u and v in respect of all private households enumerated.
- column u Enter the total number of people enumerated in private households associated with the institution (column x), sum of entries relating to the appropriate "H" forms. If none, enter a dash (—).
- column v Enter the total number of people present in these households (column x, sum of entries relating to the appropriate "H" forms). If none, enter a dash (—).
- column w Enter the number shown in column u for the line relating to the institution itself, excluding unoccupied private households.

ABSTRACT OF RECORD

Page	Sample Addresses b	Schedules k	Persons x	Present n	Absent o	Sub-totals in Sample Addresses		
						Persons	Present	Absent
1								
2								
3								
4								
5								
7								
8								
9								
Totals								

Pages from THE 1981 ENUMERATION RECORD BOOK

WILSON AND
COFFMAN

8

195

PAGES FROM THE 1855 ENUMERATION RECORD BOOK

L1

2

LIST OF RESIDENT STAFF, including their functions, PRESENT ON CENSUS NIGHT, 24/25th APRIL, 1961.

Servants, staff and dependents serving full or part time on Monday 25th April, 1961 having spent Census night travelling:

Please write in ink and read the instructions before you enter the names.

Sample File No.....

For Examination use

Act No. E.D. No. Building No.

A	B	C	D	E
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

For L2 use enclosed

LIST OF PEOPLE, including resident staff and their families, PRESENT ON CARNIVAL NIGHT, 24th/25th APRIL, 1961.

Include people working before noon on Monday 24th April, 1961 having spent Carnival night staying.

Please write in ink and read the instructions before you enter the names.

Supply the following information:

A	B	C	D	E	F	G	H	I	J	K	L
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											

POST ENUMERATION SURVEY - SS 101
[G] SUMMARY COVER

(1) Area No.	[P] Specific Address [N]	(a) Existing or <u>old</u> [E] Existing or <u>old</u> [E] or <u>Subsidized</u> Dwelling [S]
(2) E.S. No.		<input type="checkbox"/> Existing [E]..... <input checked="" type="checkbox"/> Existing [E]..... <input type="checkbox"/> Existing [E].....
(3) Whether Transferred Ref..... Transferred to File.....	IF TRANSFERRED Address reported by..... not exactly [SPLICED].....	(4) FROM OR ESS NUMBER IN 303- Married [M] [M] [M] Divorced [D] [D] [D] Widowed [W] [W] [W] Never married [NM] [NM] [NM]
(4) Interviewer		

TABLE A COPY (TRANSFERRED) ENTRY EXACTLY WITH ANY CROSSED OUT ENTRY

Number of Households	Number of Persons	Status	Year Born	Schedule Date			Source	Description of Establishment in which dwelling is located	Description of dwelling	Type of dwelling	Detailed description of dwelling	Detailed description of dwelling	Detailed description of dwelling	
				1	2	3								
1	4	4	4	1	2	3	4	5	6	7	8	9	10	11
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CROSS AMOUNT WITH CENSUS SCHEDULES

✓ X ✓ X ✓ X ✓ X ✓ X ✓ X ✓ X ✓ X

2
WHAT YOU HAVE TO DO

You will receive a photograph of the Enumeration Record Book (ERB) together with photographs of all the documents relating to the sample address.

Each sample address you are concerned with is marked with a Social Survey 1951 Serial number to the left of the first column (a) in the ERB.

The ONLY photographs which may go into the field are those of forms L, C, or F and the ERB.

NO H, I, OR P FORMS MAY BE TAKEN INTO THE FIELD.

BEFORE YOU GO INTO THE FIELD

Copy the ERB entry on to Page 1 of the Summary Cover, using continuation sheets where necessary.

IF LARGE INSTITUTION

Tag inside the cover the relevant L, C, or F Census schedule photographs (but no H schedules) and prepare the relevant questionnaire.

IF SMALL INSTITUTION (I schedule)

Prepare the relevant questionnaire.

IF NOT AN INSTITUTION (LARGE OR SMALL)

(i) For each X Census Schedule fill in the tops of the pages of a 25 Household Questionnaire. This covers Census questions 1-9 and 24-27.

(ii) Wherever a ring has been placed at CQ 10 (any job during 12 months), fill in the tops of a 25 Individual Occupation Questionnaire.

There will be 10 such rings on schedules associated with the priority Enumeration Record Books - marked A in ERB.

(iii) Tag each (ii) behind the relevant (i) in the best order for interviewing.

(iv) If a Caravan Site, prepare the relevant questionnaire about the site.

IN THE FIELD

(a) If a Large Institution, Small Institution, or Caravan Site, carry out the instructions on the questionnaire.

(b) If not an Institution or caravan Site, carry out the instructions on Page 4 of this Summary Cover.

NOTE:- WHENEVER YOU USE THE PREFIX CQ - RE REFERREING TO A CENSUS QUESTION, FOR EXAMPLE CQ 27 IS THE ONE ABOUT CARDS.

THESE ARE THE NAMES OF THOSE WHO HAVE TO BE SWORN IN AS JUDGES IN THE TRIAL OF THE CHIEF ACCUSED.

11

Item No.	Title Ref. No. from Table A where such accommodation is required	(Point(s) and position) of recommendation	Change from or insertion where instructions unchanged, or deletion of all or part of instruction or step etc.		Date of change or deletion	Signature of person making change
			R	S		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						
121						
122						
123						
124						
125						
126						
127						
128						
129						
130						
131						
132						
133						
134						
135						
136						
137						
138						
139						
140						
141						
142						
143						
144						
145						
146						
147						
148						
149						
150						
151						
152						
153						
154						
155						
156						
157						
158						
159						
160						
161						
162						
163						
164						
165						
166						
167						
168						
169						
170						
171						
172						
173						
174						
175						
176						
177						
178						
179						
180						
181						
182						
183						
184						
185						
186						
187						
188						
189						
190						
191						
192						
193						
194						
195						
196						
197						
198						
199						
200						
201						
202						
203						
204						
205						
206						
207						
208						
209						
210						
211						
212						
213						
214						
215						
216						
217						
218						
219						
220						
221						
222						
223						
224						
225						
226						
227						
228						
229						
230						
231						
232						
233						
234						
235						
236						
237						
238						
239						
240						
241						
242						
243						
244						
245						
246						
247						
248						
249						
250						
251						
252						
253						
254						
255						
256						
257						
258						
259						
260						
261						
262						
263						
264						
265						
266						
267						
268						
269						
270						
271						
272						
273						
274						
275						
276						
277						
278						
279						
280						
281						
282						
283						
284						
285						
286						
287						
288						
289						
290						
291						
292						
293						
294						
295						
296						
297						
298						
299						
300						
301						
302						
303						
304						
305						
306						
307						
308						
309						
310						
311						
312						
313						
314						
315						
316						
317						
318						
319						
320						
321						
322						
323						
324						
325						
326						
327						
328						
329						
330						

201



1
POST ENUMERATION SURVEY - SS 391

(b) HOUSEHOLD QUESTIONNAIRE

Area No.

ED No.

SD No.

Line Ref. No.

Census Schedule No.

Cat. [1]

- (i) Person slighting distinguished _____ Full Name _____ (IF DIFFERENT TO LINE REF.)
 (ii) Person responsible for return _____
 (iii) Person given to Q2 2 as SDNo. _____ (It may differ from census survey SDNo.)

THIS QUESTIONNAIRE MUST BE ADDRESSED TO THE MAIN FORM FILLER,
 ONLY IF THAT PERSON IS AWAY CAN ANOTHER RESPONSIBLE ADULT BE
 INTERVIEWED INSTEAD. YOU MAY ALSO HAVE TO ASK SOME QUESTIONS
 OF THE OTHER MEMBERS OF THE HOUSEHOLD.

- (iv) WHETHER INTERVIEWED IF NO INTERVIEW (0)

Interview
with Person No. _____

My self

No Interview _____ 0

1. I believe you filled in the Census form - Is that not
 IT SOMETHING ELSE SWOTCH TO THEM.
 BUT - IF MORE THAN ONE SWOTCH WITH THIS PERSON.

2. One of the things I have to check is that this is the right address.

This is _____

Yes _____ 1

No _____ 0

3. IF 1961 ED Address

- (i) Has this.....been remembered at all during the last five years?

Yes _____ 1

No _____ 0

If Yes (Y)

(ii) When was this

IF MOORS BUILDING ENQUIRIES GIVE FULL DETAILS ON BACK PAGE (I.
 PROPOSED WITH THIS HOUSEHOLD AND WHETHER NOT ALSO DEAL WITH THE
 OTHER BUILDING AND OWNED HOUSEHOLDS)

4. When was this place built?

1889 or earlier, 0

If after 1889 Give Year _____

ADDITIONAL USE OF THIS QUESTIONNAIRE

(WHERE 'TOP SECTION' ARE FILLED IN FROM ANSWERS GIVEN IN THE FIELD)

SEE LETTER FROM TABLE 9 AS LINE REF. NO. IF NECESSARY
 This household:-

Line ref. No.

or Letter

- (i) was received as ABSENT in the
 list but has RETURNED....., ASK Q2 1-8 and 29-37

- (ii) has moved in since Census Day...., SINCE DATE.....
 ASK Q2 28-29 about present
 accommodation

- (iii) was omitted by the Enumerator....., SINCE DETAILS ON BACK PAGE 12
 ASK Q2 3-4 and 29-37

CODE 169
TABLE 8
ENTER FIELD - ENTER ANSWER IN THIS TABLE

TABLE C(1) X IN TABLE 0

THE AMERICAN ECONOMIC REVIEW

卷之三

卷之二

卷之三

卷之三

Digitized by srujanika@gmail.com

THE TALENTS OF THE PEOPLE

100

8. *What would you do if you were faced with*

卷之三

62 — 0

2024 RELEASE UNDER E.O. 14176

THE JOURNAL OF CLIMATE

such problems. For example a
problem of calculating $\cos x$

卷之三

622

卷之三

17

QD 26 ROOMS AND PANEL H		TRIM DRB
(a) Total rooms _____	pol. (t)	In FILLIES
(b) No. of kitchens, sculleries _____	IN	SHOULD
(c) No. of (b) eaten in _____	DONAL (n)	Shared rooms count fractionally.
In shared dwellings:- Exclusive use of cooker, _____ Exclusive use of sink _____		

24. Could we talk about rooms now. You many bedrooms have you? bedrooms _____

25. Have you a kitchen? Bedsties _____
Kitchens _____ 1
None _____ 0

IF KITCHEN (1)

- (1) Do you/your household regularly eat meals in it? Dine In _____ 2
No _____ 3
- (11) Is this where all the cooking is done? All cooking in kitchen _____ 6
Some in kitchen _____ 5
None _____ 8

IF NO KITCHEN (0) OR (5) OR (8)

- (111) Where [else] do you cook? Does Not cook _____ 7
- (iv) Do you regularly eat meals in _____ (as above) Dine meals in _____ 8
Does not _____ 9

26. Do you have, _____, and _____ [NAME ROOMS]
What other rooms have you - not counting bathroom or toilet?
GIVE INFORMANTS NAME FOR ROOM.

QUERY THE USE OF ANY 800 SLEEPING ROOMS

27. Are any rooms used for business purposes? Work for business _____ 6
Retail business _____ 7
Partly business _____ 8

(1) IF PARTLY BUSINESS (8) When is it used for living in?

28. Are there any rooms which you don't use? All used _____ 4

Which room	Mr. not?	Included already?
_____	Yes	1
_____	No	2

29. Have you any rooms which you can, or do, divide up by sliding doors, partitions or curtains? Give details. No _____ 8

30. Are there any other households in the.....? [BUILDING OR =
FUTURE STATE FLAT OR HABITACLE]
NUMBER OF OTHER HOUSEHOLDS

IF ANY OTHER HOUSEHOLDS.

31. Do you share any rooms with the other household? None shared.....
Which room? Counted already? Shared with which household(s)?
Yes No

32. Do you let (or sublet) any of the rooms we have talked about?

Let(s) [sublets]
No.....

(i) IF LETS (1) which room?

33. IF NO ROOMS SHARED (1)

(i) We would like to know how far separated your accommodation is.
Can you say off all your accommodation from the other
household(s) by closing one door?

Connect shut off.....
Yes.....

(ii) IF CLOSET SHUT OFF (4)

Apart from bathroom and toilet could you?

SHUTS cannot.....
Could.....

34. Which floors are your rooms on?

Number of different floors.....
Basement, semi.....
Ground.....
First.....
Second.....
Higher [RESCRT]

35. IF BASEMENT, SEMI BASEMENT ONLY

(i) Is the basement series off from the rest of the house?
(ii) If no (1), next

Yes.....
No.....

36. What kind of cooker have you?

(i) Do you share it with any other household?
RESCRT

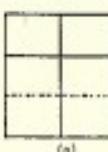
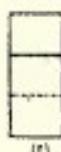
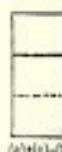
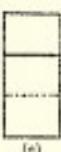
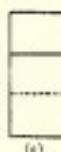
Own cooker.....
Shared cooker.....
None.....

37. Do you have a sink of ANY KIND
NOTE COMMENTS ABOUT WASHBASINS

RESCRT

Gas sink.....
Shared sink.....
None.....

RESCRT NAME



(Q) 25 OWNERSHIP AND RENTING SIN. ONLY

- (a) As owner-occupiers (including purchase by mortgage). _____
- (b) By renting it with a farm, shop, or other business premises. _____
- (c) By virtue of employment. _____
- (d) By renting it from the Council or New Town Corporation. _____
- (e) By renting it unfurnished from a private landlord or company. _____
- (f) By renting it furnished from a private landlord or company. _____
- (g) In some other way. _____

IF RECORDS 25 (a) OWNERS-OCUPATORS

30. Is your accommodation provided by telephone?

Frontiers

Gezeichnet

IE 33000.00

- (ii) How long had the Beast to run when you bought it?

21 years of use

21 years or more, 1
20 years or less 5

IF 20 YEARS OR LESS TO RUN (%)

- (14) How long was the original Report

Year

IF YOU ARE UNABLE TO REACH US, PLEASE CALL 1-800-4-A-DOIT.

- (iii) who is entitled to over 50 percent

Released 5

3. If there are no other possible lines

Parsons No. _____

Non household income

(+) IF NON-HOUSEHOLD MEMBER (S) EXPLAINS

100

THIS IS THE LAST DRAFT PAPER

REFERENCES

PHOTO BY

WELCOME TO THE

IF RECORDED AS (b), (c), (d), (e), (f), (g) ASK THIS PAGE

41. Were you a TENANT

Tenants.....1
...2IF RENT LEASE (1)

- (1) How long is it?
 (II) Is it the tail end of a long tenet?

Years
Tail end.....3
...5IF TAIL END (3)

- (III) How long was the original tenet?

21 years or more.....5
20 years or less.....6IF 20 YEARS OR LESS (6)

- (IV) Was it extended to over 20 years?

Extended (SPECIFY).....7
Not extended.....842. Is it a furnished or unfurnished tenancy? (LEGAL POSITION)
NOTE ANY COMMENTS ABOVE ACCORDING TO TENURE.Furnished.....3
Unfurnished.....243. Is whom name is the tenancy (or on whose behalf) Is it rent free? Person No. _____
Non-household member (CIVILIAN).....344. WHO IS THE MATERIAL RENTER? Person No. _____

45. Are there any special reasons why you have this accommodation such as:-

RENT

- a member of the household works for the landlord.....1
 or.....2
 or.....3 for some other reason (SPECIFY)

46. Is your landlord a relative or friend?

Relative (SPECIFY).....3
Friend4
Neither of these.....5IF NEITHER RELATIVE NOR FRIEND (5)

- (i) Is your landlord the council?

Council.....4
Re.....7

47. Is your accommodation RENT free?

NOTE ANY COMMENTS ABOVE BUSINESS RENT

Rent free.....5
Pays rent.....6

ACCOMMODATION

48. IF RECORDED AS (b), RENTING WITH BUSINESS PREMISES

- (i) What type of business premises do you rent with your accommodation?
 (II) Do you pay an exclusive rental?

Rent.....1
Shop.....2
Other (SPECIFY).....3
Inclusive rental.....4
Separately.....5

(Q) 25 HOUSEHOLD IDENTITIES

(a) Water closet (WC) with inside entrance.....	(b) use of hot water tap.....
(d) Whether shared.....	(b) whether shared.....
(e) Water closet (WC) with outside entrance.....	(c) Use of fixed bath within building.....
(f) Whether shared.....	(b) Whether shared.....

WC = flush toilet, pit latrine, chemical or
waste water closet.

(1) Use of fixed shower in bath.....

bath and shower should be connected to water and
waste pipes.

44. Is the building connected to main drainage?

Main drainage..... 1

Not..... 2

IF ANY (2) OR NO TO (e) OR (g)

(1) What type of toilet(s) have you?

WC = flush into people tank/cesspool..... 3
Earth closet..... 4
Chemical closet..... 5
Waste water closet..... 6
Other (SPECIFY)..... 750. How many flush toilets does your
household have here with entrances to the
building.....

51. IF OTHER HOUSEHOLD IN BUILDING

Do you have the sole use or use
for your household?Sole use (inside)..... 1
Shared with (SPECIFY)..... 2

52. Have you an outside flush toilet?

Outside..... 3
No..... 4

IF OUTSIDE TOILET (3)

(1) Is it safe for the use of your
household?Sole use outside..... 5
Shared with (SPECIFY)..... 653. Did you have any difficulty deciding whether
any of these were inside or outside?No difficulty..... 7
Yes (SPECIFY)..... 8

RECORDABLE OTHER IDENTITIES

52. Has the building a piped water supply?

Piped supply..... 1

Not..... 2

IF NO FIXED SUPPLY (2)

(1) How do you get water?

53. How do you get hot water?
only by heating in kettle, pan,..... 1
Laid on..... 2
Appliance (SPECIFY)..... 3
Other (SPECIFY)..... 454. IF BOXES (2, 3, 4) AND OTHER HOUSEHOLD
IN BUILDINGHave you a hot water supply of
your own?

Not..... 5

Shared with (SPECIFY)..... 6

55. Do you have a fixed bath?

Fixed bath..... 1

Not..... 2

IF FIXED BATH (1)

(1) Has it got hot and cold tap?

Hot and Cold..... 3

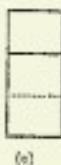
Cold only..... 4

56. Have you a fixed shower?

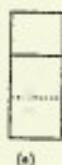
Fixed shower..... 5

Not..... 6

RECORDABLE OTHER IDENTITIES



(a)



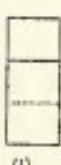
(b)



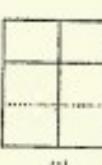
(c)



(d)



(e)



(f)

D) 27 CARS AND GARAGING

- (a) Number of wholly or partly privately owned cars or vans owned or used exclusively. (Visitors' cars are excluded) _____
- (b) Where normally kept overnight:
- (i) In a garage or carport within grounds _____
 - (ii) In a garage or carport elsewhere _____
 - (iii) Within grounds but not in garage or carport _____
 - (iv) On the road/street or verge _____
 - (v) Elsewhere, give details _____

58. How many cars or vans do members of the Household own?
IF NONE OR ONE ONLY, CHECK

[i] IF ANY

Are any of these not used by the household?

Used _____
not used (EXPLAIN) _____

59. Are there any cars or vans which they do not own but have the sole use of?—
For example a car provided by a firm or someone else?

Previously used _____ First _____
Someone else (SPECIFY) _____

60. Were there any cars or vans which you were doubtful about including or
thought of leaving out and didn't?

No _____
Give [GIVE REASON AND DETAILS] _____

IF ANY CARS OR VANS

61. Are these all used as private?
RESPONSIBLE
MILITARY (a) _____
[Private and (SPECIFY)
not private _____]

IF ANY PRIVATE OR PARTLY PRIVATE CARS OR VANS

62. Does the household use a garage or carport?
GIVE Number _____
None _____

IF A GARAGE OR CARPORT USED

- (i) There is 1 (are there?)

IF MORE THAN ONE VEHICLE

- (ii) Can you get ALL the cars/vans in at once?

Yes _____
No _____

63. Where do you normally keep the car(s)/van(s) overnight
OTHER THAN EACH INDIVIDUALLY:
- (i) In a garage or carport within the grounds _____
1 _____ 1 _____
2 _____ 2 _____
3 _____ 3 _____
4 _____ 4 _____
5 _____ 5 _____
 - (ii) In a garage or carport elsewhere _____
1 _____ 1 _____
2 _____ 2 _____
3 _____ 3 _____
4 _____ 4 _____
5 _____ 5 _____
 - (iii) Within grounds but not in garage or carport _____
1 _____ 1 _____
2 _____ 2 _____
3 _____ 3 _____
4 _____ 4 _____
5 _____ 5 _____
 - (iv) On the road/street or verge _____
1 _____ 1 _____
2 _____ 2 _____
3 _____ 3 _____
4 _____ 4 _____
5 _____ 5 _____
 - (v) Elsewhere, give full details _____

REASONABLE CARS AND GARAGING

1	2
3	4
5	6

(a)

1	2
3	4
5	6

(b)

1	2
3	4
5	6

(c)

1	2
3	4
5	6

(d)

1	2
3	4
5	6

(e)

1	2
3	4
5	6

(f)

45. Did anyone here talk to the Census person when the form was delivered?

Yes.....1
No.....2

46. After you had filled in the form did anyone speak to the Census Person?

Yes.....3
No.....4

NOTES

POST ENUMERATION SURVEY - SS 391
(c) INDIVIDUAL OCCUPATION QUESTIONNAIRE

FOR USE ONLY WITH SAMPLE ADDRESSES IN ERB4 LABELLED B.D.L. IN RED.

COPY ACROSS ALL THE THINGS ABOVE THE LINE ON EACH PAGE BEFORE GOING INTO THE FIELD.

THE PERSON YOU HAVE TO INTERVIEW WILL BE MARKED WITH A RING AT Q9 ID ON THE CENSUS SCHEDULE. THIS INTERVIEW MUST NOT BE MADE UNTIL THE HOUSEHOLD INTERVIEW HAS BEEN COMPLETED.

(1) Full name of person to interview.....

(11) UNDERLINE ONE

Likely to be a continuation of Household Interview - SAME Person.
Likely to be DIFFERENT Person from the form filler.

Area No.

ID No.

SS No.

Census Schedule No.

Person No.

(10) WHETHER INTERVIEWED

IF INDIVIDUAL NOT INTERVIEWED (2)

Interviewed..... 1

Not Yet.....

No Interview..... 2

.....

IMPORTANT TWO JOBS

During week ended April 11-17th	18
During week ended April 18-24th	19
On Monday April 18th	18

ENTER ANSWERS AND CODES



2

Yes	No	Yes	No
Yes	No	No	Or No
Yes	No	Or No	Or No



OTHER COMBINATIONS ARE IMPOSSIBLE - DON'T USE.

NAME OF MAIN EMPLOYER DURING WEEK OF 18

ADDITIONAL WORK

During the week ended April 11-17th	17(a)
as no employee	(b)

OFFICE USE

IF JOB DURING WEEK (8) OR (9)

1. When did you start working for _____?
Year _____
(1) IF 1966 - GIVE DATE

2. Have you been working for _____ without a
break? Yes, continuously _____
No _____
(1) IF NO (2)

GIVE DATE LEFT BY RETAILERS ABOVE
CARRIER TIME

3. IF DURING WEEK NOT NOT ON HOLIDAY (9)

ASK MY JES DURING WEEK (WEEK
END APRIL 18TH NOT ON HOLIDAY).

4. IF NO ADDITIONAL WORK, GO TO Q9 (7(a))

GO TO QUESTION 3.

5. IF ADDITIONAL WORK, YES TO Q9 (7(a))

Did you have any difficulty deciding
who was your main employer during
the week before the census?No difficulty _____ 3
Yes (give details) _____ 4

GIVE DETAILS BELOW

DETAILS OF ADDITIONAL WORK IN WEEK. GIVE: Type of work, Hours, How paid etc.

6. IF JOB DURING YEAR BUT NOT IN WEEK (9)

ASK MY JES DURING YEAR BUT NOT IN
WEEK ENDED 3RD APRIL.7. IF NO JOB DURING WEEK (9) OR (8)
IF NO ADDITIONAL WORK, NO TO Q9 (7(a))

- (1) Apart from this work you have said me
about? Name you in the next year date,

Work which is paid by the hour _____

- A Part-time work _____ 2
B Temporary work _____ 3
C Paid work _____ 4
Commissioned or freelance work _____ 5
Work in your own or family
business _____ 6
Any other paid work _____ 7
None of these _____ 8

8. Q9 1+2

- (1) Did you do any of these during
April
During April _____ 1
Some in April _____ 2

(1) IF IN APRIL (1), GIVE PAY RATE

CG 19 - ON MONDAY APRIL 19TH		OFFICE USE				
Registered at Ministry of Labour Exchange or PES.	(a)					
Seeking work but not registered.	(b)					
Unable to seek work because of temporary sickness or injury.	(c)					
Waiting to help out a job starting both April or later.	(d)					
Wholly retired.	(e)					
Not seeking work for any other reason (SPECIFY).	(f)					

IF NO JOB ON MONDAY (b), (c), (d) OR (e)

8. I understand that you did not have work at any kind on Monday, April 19th. Is that correct?
Incorrect or Incorrect..... 1
Correct..... 2

8(1) IF INCORRECT OR 20(1) - EXPLAIN

9. IF CORRECT (2)

- Have you had any work either full-time
or part-time since then?
Started work since April 19th..... 3
Has had no work..... 4

8(1) IF STARTED WORK SINCE (2)

- On that Monday were you waiting to
start a new job, looking for work
or at that time did you not
considered starting work?

Work not yet considered..... 5
Job starting (DATE)..... 6

10. IF HAS HAD NO WORK (4)

- Are you looking for a job or work of
any kind?
Yes Looking..... 7
Not seeking..... 8

.....
was looking for work..... 7

11. IF NOT SEEKING WORK (8)

- In this because you don't require a
job at present or if there's a
special reason why you are unable
to seek work?

DETAILS OF WORK SEEN ON MONDAY
APRIL 19TH. Give type of work,
full or part-time, when was hoping
to start.CHECK REASON WITH CG 19 (a), (c), (f)
AMPLIFY IF NECESSARY.DETAILS OF SEEKING WORK.
Give use made of Agencies,
Employment, Advertisements etc.

12. Were you at any time during April registered as a Ministry of Labour Employment Exchange (or Youth Employment Office)?

REGISTERED WITH CG 19 (a).....

Registered (SINCE DATE)..... 1

No never registered..... 2

No not in April..... 3

COPARTNERSHIP [REDACTED]	4	FORMER OCCUPATION [REDACTED]
TRUSTEE [REDACTED]		

13. I see your occupation is/ems.....

PROBE FOR MORE DETAIL ABOUT OCCUPATION

- (1) What do/did you actually do?
DESCRIBE FULLY

14. Does one need any paper qualifications for this job?

No qualifications required 0
Some (GIVE DETAILS)

15. IF CO. IS [REDACTED] REQUIRED

- (1) How long is the training/apprenticeship term
(2) Was this field in advance
(3) What qualification does it lead to? Placed in advance 2
Not placed in advance 3

16. Do you have anyone working for you or supervise anyone else's work?

None 4
Some (GIVE DETAILS)

IF SOME (S)

- (1) What do they do?

[REDACTED]

MAIN EMPLOYER'S NAME AND BUSINESS

1

TODAY'S EMPLOYER'S NAME AND BUSINESS

31

FBI-L-TMC 2/2/90

187a II

- (b) IF PART-TIME ISSUES OF FORM
(DELETING REAL ISSUES)

17. IF NOT ADLs REVERSED OR IS IT SO?

What gives the grade, rank, or title of the person immediately above you?

18. 疾病的危險因子

10. PLEASE FILL IN FOR MORE DETAIL ABOUT NATURE AND NATURE OF BUSINESS

BUCKI Trade name if any.

- (1) Could you tell me a little more about what the firm you worked for actually does?

ADDRESS OF PLACE OF WORK

13

TRANSPORT USED FOR LONGEST DISTANCE

14

20. IF ADDRESS INADEQUATE EXPLAIN. IF NO FIXED PLACE EXPLAIN

21. Has there (had you) any doubt about what to give as your place of work?

No doubt.....0
Yes (GIVE DETAILS).....J22. How do you get to work? Could you describe the stages of your journey?
GIVE METHOD OF TRANSPORT FOR EACH STAGE.PROBLY - PUBLIC/PRIVATE FOR BUS,
SOLO/COMBINATION FOR MOTOR CYCLE.RECORD ANY COMMENTS ABOUT USING DIFFERENT METHODS ON DIFFERENT OCCASIONS -
TWO DAY WORK IS MOST COMMONLY USED.23. Do you cover the greatest distance by or?
Method of travel for greatest distance _____

RECORDED TRANSPORT WITH OO 14.

TULL TIME STUDENT IN
APRIL, MAY, JUNE TERM

22

OFFICE USE

7. QUALIFICATIONS OBTAINED AFTER ATTAINING AGE 16

23(a)	(b) CHECK ARE MAIN SUBJECTS GIVEN?

24. How old were you when you finished full-time education?

RECORDS WITH QD 22. Age _____
Not finished. 1

25. IF FULL TIME EDUCATION FINISHED UNDER 16

- (i) Did you gain any qualifications after leaving school, what is at work, or
on day release, through evening classes, correspondence courses, or by
studying on your own. So further exams... 2
Some exams passed... 3

(ii) IF PASSED EXAMS AFTER LEAVING SCHOOL (i) - GIVE DETAILS

Qualification	Age obtained	Main subject
.....
.....
.....

26. IF WAS IN FULL TIME EDUCATION AT AGE 16

- (i) What examinations did you pass after your 16th birthday and during your
full-time education?

Qualification	Age obtained	Main subject
.....
.....
.....

(ii) Did you pass any other examinations after completing full-time education?

.....
-------	-------	-------

27. CHECK ANY QUALIFICATION GIVEN IN QD 23(i) AND NOT DEALT WITH SO FAR

Qualification	Age obtained	Main subject
.....
.....
.....

28. Have you any qualifications which you thought of including on the Census form
and did not?

None.... 0
Yes.... 1

(i) IF YES (i) - GIVE REASON WHY NOT INCLUDED

Qualification	Age obtained	Main subject
.....
.....

1
ESTATE SURVEY FORM - NO. 100

(a) INSTITUTION QUESTIONNAIRE

(FOR USE IN ESTATE PLANNING AND TAXABLE INVESTIGATIONS)

DEFINITIONS AND INSTRUCTIONS FOR RECORDED INFORMATION
 PROVIDED ARE GIVEN IN THE INSTRUCTIONS TO CROWN
 INVESTIGATION. PAGES 13, 28, 30 & 34, 37, 38 & 39.

INVESTIGATION NUMBER _____

- (14) Name Postcode establishment or vessel
 NO FURTHER ACTION IS REQUIRED Number _____
- (15) Ring type(s) of item and say how many of
 each kind were used,
100 No. _____
 101 No. _____
 102 No. _____
- (16) IF ANSWER IS YES TO "WHAT DESCRIPTION"
 Give Institution Category Code from
 Official Survey RMS List (A) 103 _____
 Was this confirmed is CMI (P) 104 _____
 To (GIVE CONFIRMED CMI (P)) 105 _____
- (17) Person responsible for institutional records
 (From RMS) (See Person to ask for)

1. Person giving you information,
 2. Give full description of type of establishment,

3. Has the nature of the institution changed since 1961? Unchanged
 Yes (GIVE DETAILS)
 No (GIVE DETAILS)
4. Hold a list on sheet provided of all the buildings
 associated with the institution,
 5. Give address and description of location of each building,
 6. Mark these buildings on the map at the front of the RMS or
 make a sketch map on Page 3 of the Surveyor's Guide, show
 carefully our boundaries to the institution grounds,
 7. Are any buildings situated on the other side of a public road,
 or in a different road from the main institution, None
 Tel (106 OR 107)
8. Are any buildings outside the Surveyor's District, None
 Tel (108 OR 109)
9. Has any of the buildings been built or acquired since 1961, None
 Tel (110 OR 111)
10. If YES ANSWER (11) (CHECK OR LASH)
 Give details and date built or acquired on your list, None
 Tel (112 OR 113)
11. Did the "institution" occupy any other buildings in 1961 None
 Tel (114 OR 115)
12. Date building demolished or disposed of, address and description,

Address of building	Description	Other side or different roof	Private ID#	Title or original address file	Notes and additional data

12. IF ANY B. FORMS USED

- 12a' For each private household name which building they occupy.

12. IF ONLY PART OF BUILDING

[Describe their accommodation and the nature of the rest of the building.]

- 12b Check if any household number has only meals provided by a institution.

12. IF ANY NUMBER

[State who and which meals.]

Household	Description of building and accommodation	Details of meals provided

NO FURTHER ACTION IS REQUIRED FOR THESE HOUSEHOLDS.

13. What other residential staff are there? HAVE LIST OR CHECK LAST ALMANAC GIVEN OR PLATE PORT
14. Where do they sleep? HAVE NOTED ON LIST OF BUILDINGS
15. Where do they have their meals? HAVE NOTED ON LIST OF BUILDINGS
16. Were any private households missed?

None missed
Yes (give details)

17. Does the "Institution" have any nonresidential rooms?

All residential....
Some non-residential....

12. IF ANY NON-HOUSEHOLD

[Were any included on the Census return?]

Part included.....
Yes (give names)

18. Was the correct form used for each private household and part of the institution?

All correct....
Incorrect (Explain)

IF YES FORM 100B

HAD THE LISTING BEEN MADE CORRECTLY COL A : 1-90 DASH COL B : 1-10
DASH COL C 910-2

Listing done correctly.....
Incorrect (SPECIFY).....

19. Is there types of instructions you may have to check the criterion used to separate staff and other people?
20. Are there options you used for listing the names on the form such as from alphabetical list, staff register, bed occupancy order etc. No option used.....
21. Are the reason for my deletion (NAME OF OR TWO PHOTOGRAPHS)
22. Were you any evidence to suggest that the spelling and date incorrectly, or that certain people were deliberately put on the single line or others deliberately put on a non-single line?
23. Were there any people or situations of you (particular) that you "suspected" had been aware about whether or not to include? No suspect.....
Yes but didn't.....
- IF BAD FORMS (1)
Give details - reasons for delete and double marks
24. Ask the Manager if he had any particular problems or difficulties in taking the Census.

PORT INSPECTION SURVEY - NO 10A

(e) CHARNIN SITE SURVEYS

THE PROCEDURE FOR IDENTIFYING A CHARNIN SITE IS
GIVEN IN THE INSTRUCTIONS TO CHARNIN SURVEYS,
APPENDIX 1 OF PAGE 51-52

Area No.

R.D. No.

SD No.

- (i) Sample Address or originally entered _____
- (ii) Random Number _____
- (iii) IF TRANSFERRED
Was the Random number transferred correctly? Yes..... No.....

- (iv) Number of Dwellings on the site reported by the Inspectorate _____
- (v) Number reported EQUAL than the Random Number _____
Number reported MORE than or EQUAL to the Random Number _____

1. Does the whole site lie within the boundary of the Rural
NAME OR TOWN Completely in Rural.....
Outside (mostly or partly).....
No response.....
2. Has the site holiday acreage as well as residential acre? Res holiday acreage.....
Residential acreage.....
IF RURAL CHARNIN SITE
(i) New survey _____
(ii) Are the two types on completely separate parts
of the site or are they mixed? Completely separate.....
Mixed.....
3. Describe the listing, if any, in Table A and Continuation sheets Total listed.
4. Draw a sketch map on Page 3 of the Survey
Cover to indicate the layout of the Site.

IF POSSIBLE

- (i) Work each curvaceous on the map by its Line Ref. No. from Table A.
(ii) Report (ENCLOSURE) for any listed curvaces which you cannot trace.
(iii) Find out about any unlisted curvaces derived on the site.
(iv) Indicate Non-residential building curvaces.
(v) Indicate any sheds, hangars, houses or other
residential accommodation on the site and give
description and full address.

- (vi) Account for obvious possibilities in the order of listing.

IF POSSIBLE

(vii) EXPLAIN OVERLAP

5. Is there any reason to suppose that the sampling has not
done correctly? No evidence.....
Possibly incorrect.....
IF INCORRECT
(i) EXPLAIN OVERLAP
6. Do any households occupy more than one surface on the site? Nobody.....
Yes.....
IF TWO L.S.
(i) GIVE DETAILS OVERLAP

TO A HOUSEHOLD INTERVIEW FOR THE CURVACE SELECTED BY THE INSPECTOR

SOUTHAMPTON UNIVERSITY LIBRARY

Date of Issue

084

26 MAR 1974

CANCELLED
7/3

26 NOV 1975

30 MAY 1980

HER MAJESTY'S STATIONERY OFFICE

Government Bookshops

49 High Holborn, London WC1V 6HB
13a Castle Street, Edinburgh EH2 3AR
109 St Mary Street, Cardiff CF1 1JW
Brazennose Street, Manchester M60 2AS
50 Fairfax Street, Bristol BS1 3DE
258 Broad Street, Birmingham B1 2HE
90 Chichester Street, Belfast BT1 4JY

*Government publications are also available
through any bookseller*